

MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

VOL. 6. No. 16.
WEEKLY.

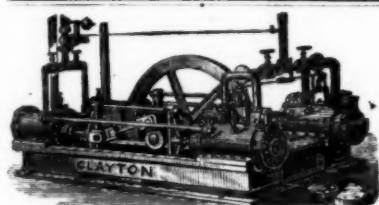
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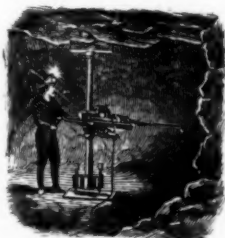
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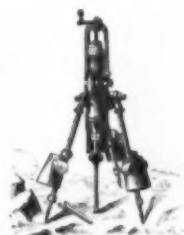
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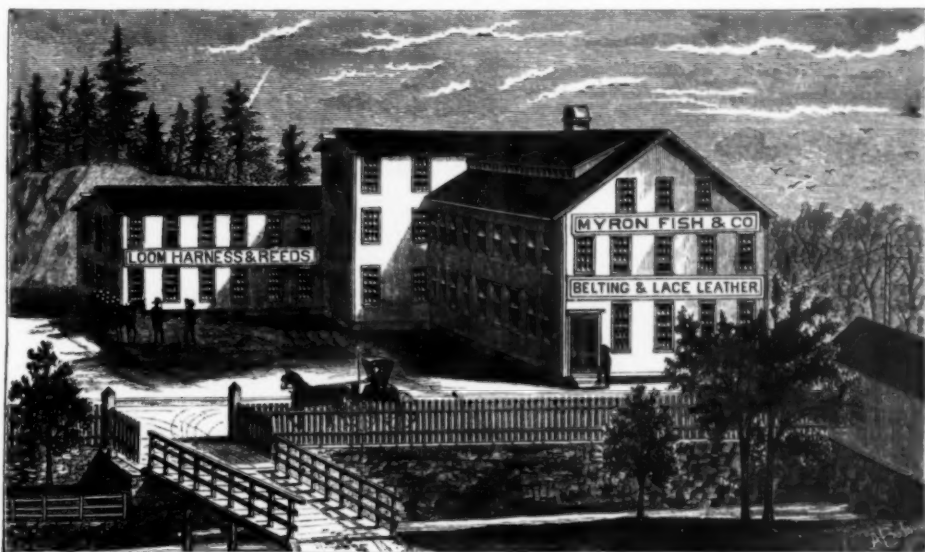
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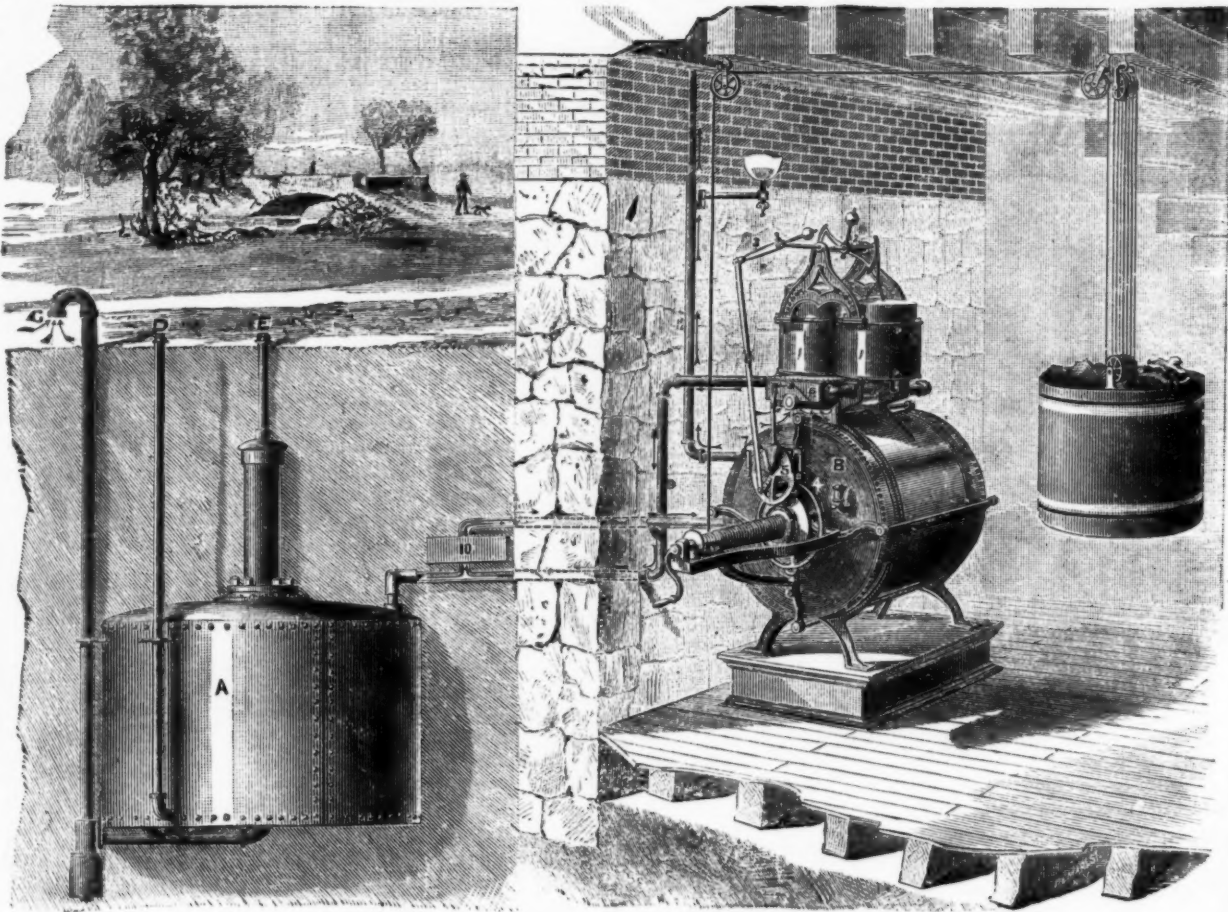
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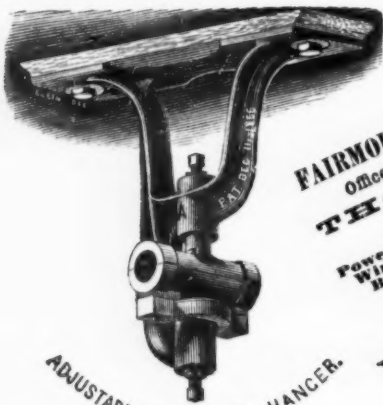
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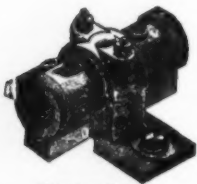
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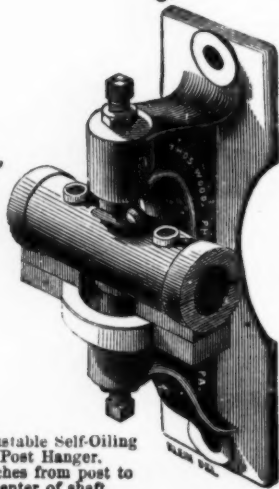
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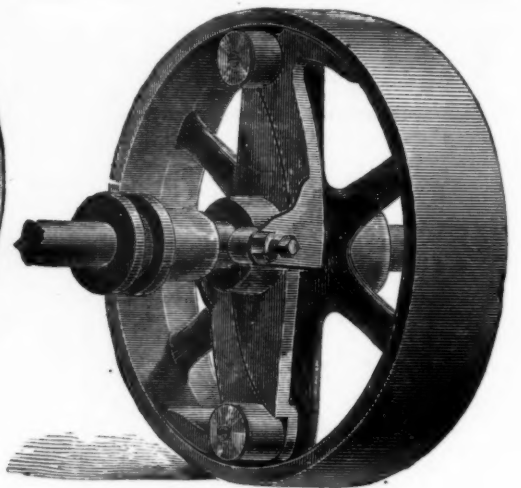
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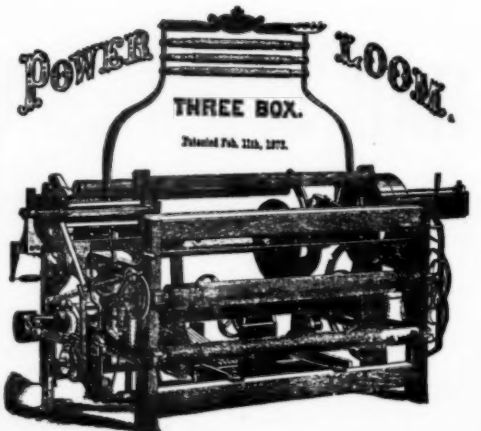
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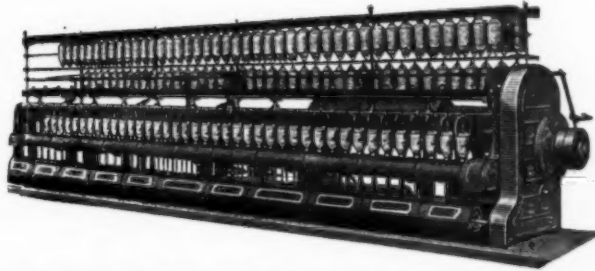
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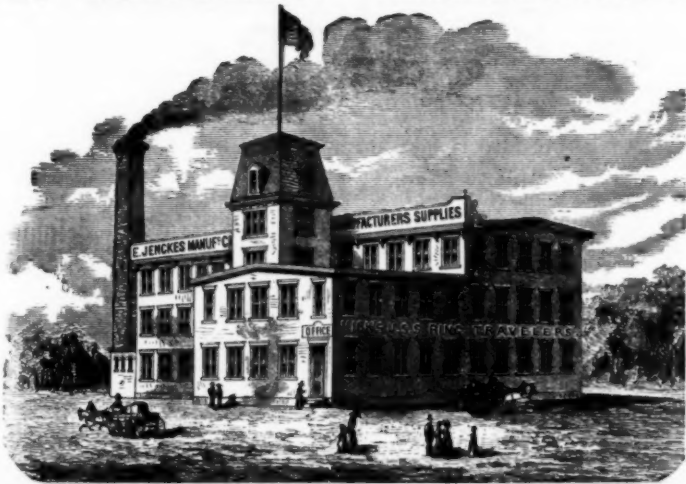
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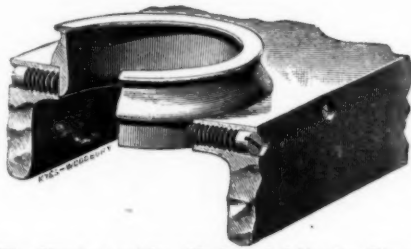
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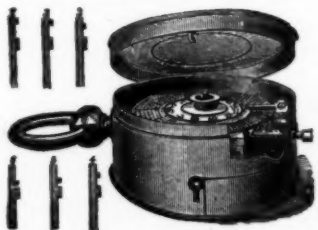
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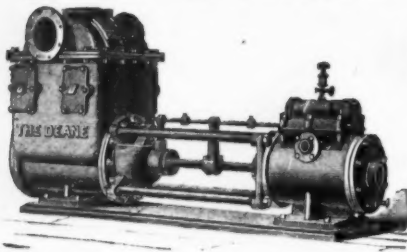
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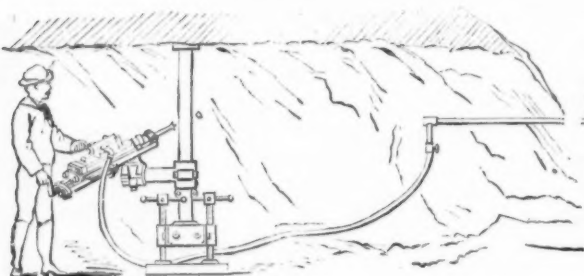
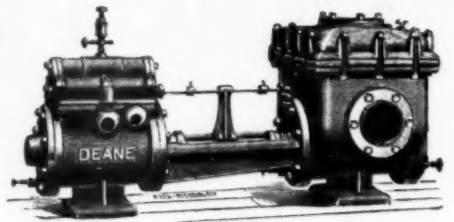
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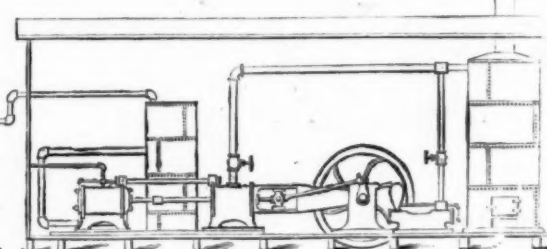
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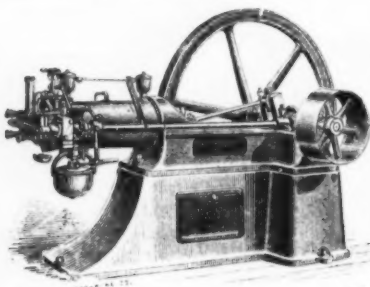
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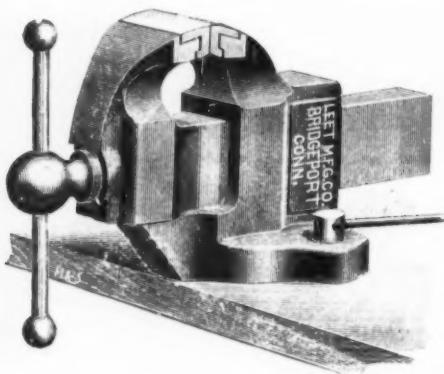
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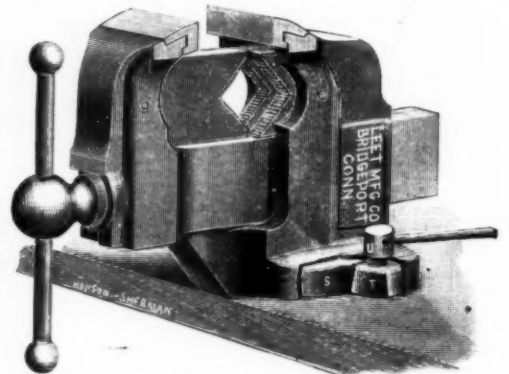


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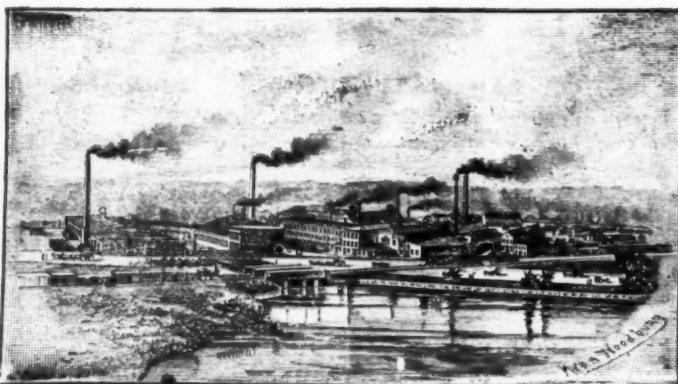
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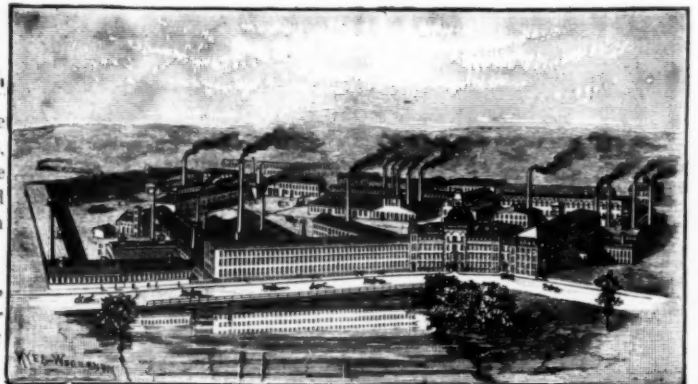
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THE future home for the young men of the country, says the Coal Trade Journal, is in the South, rather than in the West. The West is an agricultural country, where, over its greater portion, coal, ore and lumber are scarce. Those going thither must raise corn or wheat. Going still farther west, they must become sheep or cattle raisers, at from 1,000 to 3,000 miles removed from the centres of civilization. In the South it is different. While primarily an agricultural section, it has abundance of all minerals and lumber.

Notes From Dixie.

BY CHAS. H. WELLS.

Hickory, North Carolina, is one of the many Southern towns where capital is needed, and where manufacturing industries of almost any kind would pay very handsomely. In the immediate vicinity of the village are several fine locations for factories, and the cordial, open-handed people of the town will gladly welcome capitalists in their midst. The Piedmont wagon factory at that place is an example of what can be done there when brains and money are united. The "Hickory" wagons are seen everywhere in the South, from Richmond to Key West, and are almost as well and favorably known as the famous "Studebaker" or "Tennessee" wagons.

A dozen or more people in North and South Carolina have begged me to write up that "gigantic organ dealer," Daniel F. Beatty, of Washington, N. J., who is now carrying on operations in the region of the tar heels. His latest scheme for getting money is to offer the unsophisticated rustics a due bill for \$90 for \$75 in cash, provided the sum is sent him within ten days from the time the offer is made. This catches a good many people. He advises the innocent to borrow a part of the money from friends if the whole amount cannot be raised in any other way. In his very seductive offer he does not state when he will ship the organ.

Speaking of advertising, it may be as well to remark right here, that the "Dixie Notes" are not designed to fill the part of an advertising column, and all parties desiring free puffs and complimentary notices of their wares—unless such notices may be legitimately classed as interesting gossip—are respectfully referred to the publishers of this paper. This is in answer to several "concerns" in Georgia, Alabama and Tennessee who have been offering "inducements" for free puffs in this column.

Now that the election excitement has blown over, trade all through the South has begun to revive, merchants are ordering their new goods and "everything looks lovely." There have been at least \$300,000 worth of powder and fire works discharged within the past fortnight—and yet people say that money is scarce in the South. Well, some of these good folks who aspire to post offices, marshal-ships, *et cetera*, will get left, and those who are sticking to their farms and leaving politics severely alone are the best off after all.

The cotton crop report from what is known as the Memphis district—comprising West Tennessee, North Alabama, North Mississippi and North Arkansas—has been made. There is a reduction of fourteen per cent. over last year's crop, owing to bad weather and unfavorable conditions during the picking. The report says that the cotton will be marketed with more than the usual rapidity.

One of the St. Louis papers says there is an increasing demand for Southern iron in New England. The Virginia iron is said to equal that of Pennsylvania and is from fifty to seventy-five cents a ton cheaper,—because labor and coal in Virginia are cheaper than in Pittsburgh or Reading. Some Georgia iron is sent to Boston, but the freight of \$3 a ton takes off most of the profit. Alabama has the advantage of most of the Southern States in this respect, because she has a market at Mobile as well as excellent facilities for cheap shipment via boat or rail either from Mobile or Birmingham.

The cotton mills at Piedmont, S. C., about twelve miles from Greenville, have been paying the Columbia and Greenville Railroad 83 cents a bale for hauling cotton that distance and 17 cents drayage, making the cost of each bale from Greenville—the buying point—to the mill, just one dollar. Colonel Hammett has just made a new arrangement whereby he gets his cotton hauled by wagon all the way from Greenville to the mill for fifty-cents a bale, thereby saving fifty per cent. on each bale. The new scheme, Colonel Hammett says, will save the mill about \$2,000 a year.

The State Fair at Columbia, S. C., last week was a decided success, although the attendance fell below the estimates. On Thursday, the "big day," there were probably five thousand people present. The races by the same horses that were exhibited at Greenville a week previously were attractive, and the art display was a feature of the exhibit. There was one objection,—the same one that was raised at Greenville,—there was too much horse-racing and gambling and too little attention given to useful and instructive exhibits. The fairs next year will be dismal failures, unless all this is remedied. South Carolina could make an exhibit of native woods, cereals and fruits that could not be surpassed by any State in the Union. Why is it not done? Horse-racing may be a necessary "adjunct" to a fair, but it will not invite capital to locate in the State, nor will it improve the present "lackadaisical" methods of farming.

Tobacco is the lever by which the Western counties of North Carolina are to-day being lifted to prosperity and wealth. Some parties have recently located near Newton in Catawba county, and their first crop of "the weed" was so fine that next year they will go into the business on a large scale. The Catawba tobacco is of a finer yellow color and is not so strong as the famous Buncombe crop. There is no reason why, in a few years, the thriving village of Newton should not be the centre of a large tobacco manufacturing region. The farmers of Catawba have money, brains, and enough Dutch blood in them to be energetic, therefore in a few more years I predict Newton will be a tobacco depot of importance.

Mr. M. O. Sherrill, just elected State Senator from the Catawba district, is the owner of a fine tobacco establishment that can be used either as a warehouse or factory. It has one of the finest "dry rooms" in the State, constructed on scientific principles. The building is of brick and wood, three stories and about 50x50 feet. The water supply is excellent, and there are two railroads within a hundred yards of the door.—One railroad runs to Louisville, Ky., the other to Columbia, S. C., and Southern points. To an energetic man with \$10,000 or \$20,000 who will go into business in the right way, Mr. Sherrill will sell this establishment on reasonable terms. His duties as State Senator take him from home so much that he has no time to look after the factory and will therefore sell to responsible parties. He may be addressed at Newton.

Capt. Allen of the Richmond and Danville Pullman service tells a good story. An old man got on his car at Montgomery to go to Washington. He was evidently from the country and had never been on a sleeping car before; he paid the extra fare in silver dollars,—extracted from a primitive looking leathern wallet,—and, by and by, after the porter had made up the beds, the old man looked anxiously around as if uncertain as to how to get to bed with propriety. The other occupants of the car saw him go out of the rear door on to the platform, and after

a period of ten minutes, or more the door opened, a voice called out: "All you uns look out I'm a comin'," and the old man dashed through the car with all his clothes, shoes and other "fixings" in his hands. The scene may be imagined. The convulsed spectators heard the old man say, soliloquizing, as he pulled down the curtains:—"Wall! ol' Arkansaw may be a *little* slow but he gits thar jest as hard!"

Preparations for the great World's Fair at New Orleans are now so far advanced that success may be predicted for the enterprise. All the departments will be well filled, and I am told that the timber display from the Carolinas will surpass anything of the kind ever before attempted. The result of the fair ought to be the establishment of closer commercial relation between the Northern and Southern States.

Tourists who are going to the exposition will find some little difficulty in securing board and rooms unless such arrangements are made some weeks in advance. It has been my experience in New Orleans, that the pleasantest way to live is to secure a nice room on Camp Magazine or some of the up-town streets and take your meals out. You can breakfast in a novel (and delightful) fashion at the quaint old French market down at the foot of Canal street for twenty-five cents. The coffee of this market is world-renowned. Moreau's restaurant up-town, near the Scott statue, is the Delmonico of the Crescent City, while smaller eating houses abound. To be in style you must only eat two meals a day—breakfast at nine and dinner at five. Very few boarding houses furnish lunch at noon.

Col. H. P. Hammett, president of the Piedmont, S. C., cotton mills, tells me he will have a fine exhibit at New Orleans of the various products of his mills. The little village of Piedmont is a model. No one is allowed to touch liquor under any circumstances; the houses are as neat as new pins; musical instruments abound; the free reading room is the centre of attraction, and the moral tone of the place is extraordinary. The librarian at the reading room says Scott and Dickens are more read than any other books of fiction, while Moore, Tennyson and Bryant are the favorite poets. Are not these elevated literary tastes for a manufacturing hamlet in the "fastnesses" of South Carolina?

DRIFTWOOD.

The Raleigh State Exposition was the means of drawing about \$10,000,000 of capital to North Carolina.—Several large tobacco warehouses in Asheville are for rent.—A shock similar to an earthquake passed over Buncombe county one day last week, and scared the people a good deal. It caused no damage to property.—Chunks of dogwood, two feet long and six inches square, suitable for making shuttles, sell for \$2 each in Western North Carolina.—There is a fine opening for a flouring mill at Newton, N. C., as the surrounding country produces vast quantities of fine wheat.—The management of the Cape Fear and Yadkin Valley Railroad has issued a neat little book for the use of capitalists who desire to invest in the South. Address the company's offices at Fayetteville, N. C.—The men who make jugs at Jugtown, N. C., earn \$3 to \$4 a day each when times are good. The mud from which the jugs are made costs only \$2 a wagon load.—The great drouth in the Carolinas, that begun in July, has at length been broken by a heavy rain.

Read the Prospectus of "THE NEW SOUTH," in the advertising columns.

The Rapid Growth of Asheville, North Carolina.

ASHEVILLE, N. C., November 22, 1884.

Editor Baltimore Manufacturers' Record:

Being a regular reader of your valuable and public-spirited paper, I wish to say a few words regarding the remarkable increase in inhabitants, business and manufacturing in Asheville, all of which are of such recent date as to be simply wonderful, even when three such incentives to prosperity are given as railroad, summer visitors, and tobacco.

Asheville has long been known as a resort for persons with disease of the lungs, dyspepsia, and other complaints,—great numbers of whom are either cured, or so much benefitted, that they buy land and enter into business of different kinds. Consequently real estate has risen to double, and in many cases, has trebled in value, and it is not unusual to see from 50 to 100 houses building during a short ride through the town. The census of 1880 gave a total of 2,616 inhabitants; that for 1883 gave a total of 3,874, and it is estimated that by the end of the present year a careful census will give 5,000 or over. If it is taken into consideration that those who come, stay and invest money, the above figures give great encouragement.

Tobacco.—There are four immense warehouses for its sale, and during the season there are buyers from all parts representing the principal factories in the country. An English firm is also represented by heavy buyers of the best grades. We have two factories of smoking tobacco, which do a large business, and another just completed, and three of chewing which also do a large trade, though they by no means begin to consume a fourth of the tobacco sold on the market, and more factories could be established with great profit, as the owners would save transportation, which is no small matter.

Tobacco planting.—Though a long and troublesome crop, tobacco pays much better than cotton, and as it is now admitted that, with the help of fertilizers, just as good crops can be made on old as on new land. A much larger acreage is planted every year, and many farmers who four years ago could scarcely clothe themselves, are now making money "hand over fist," and the blue and hatternut-colored clothes of our countrymen are rapidly giving place to the tight pants and Derby hat of the present day. There are fine openings for manufacturing of every kind, as the French Broad river, which runs within a mile of the town, is an unfailing source of power, with many desirable locations for mills on its banks, and lumber can be floated from all parts of the country above with very little cost. So much has been said of the variety, quality and quantity of the lumber which is furnished by the forests of western North Carolina, that I will only say it is all true and the supply is almost inexhaustible.

Mining.—To be brief I will quote from Prof. Kerr's Geology of North Carolina for 1875, appendix C., in which he says "from want of time his list necessarily was very imperfect; it shows however a variety of commercially important minerals, and ores which is greater than any other State of the Union." He mentions the names of 140 different kinds, the majority of which are found in the western part of the State.—Before closing this short and consequently incomplete summary I wish to say that all parties desiring more thorough information of Asheville and vicinity should procure a copy of the Directory and Gazetteer of Asheville and Buncombe county, which is very complete up to 1884, and for information on geology and mineralogy Prof. Kerr's book already referred to. The hand-book of North Carolina will also give most valuable and reliable information of all points concerning the State, and can be procured by application to the Department of Agriculture, Raleigh, N. C.; also Prof. Kerr's book.

Any one after reading the above mentioned books will be forced to exclaim "North Carolina is a world in herself."

TAR HEEL.

P. S.—Here in Asheville, Col. W. E. Williamson has just finished a large factory for tobacco; Col. Ray has an immense one nearly finished; there is an \$8,000 Presbyterian church being built; 50 feet has been added to the Farmers' Warehouse; and Hatch & Riley have started a carriage and wagon factory (steam)

"THE NEW SOUTH" is designed to meet a want that has now become imperative for some reliable and unbiased source of information as to different sections of the South.

DYERSBURG, TENN., NOV. 17, 1884.

Editor Baltimore Manufacturers' Record:

A. M. Stevens is now converting his grist mill into a 100 barrel, full roller process, mill on the Case Manufacturing Co. system, and will be running in about 30 days. Within the next 30 days he will also put up a planing mill in connection with his lumber yard.

This is a good place for a cotton factory for spinning and making of coarse cotton goods, and for the manufacturing of the ordinary grades of furniture.

Referring to your remarks on the defeat of the railroad commission in this State, in your issue of November 15, there are two sides to that question. Question.—If it cost 50 cents per bale to carry cotton 100 miles, how much will it cost to carry it 75 miles? Railroad says \$1.45. Railroad will go to the foot of the class, but rake in the currency all the same.

If our correspondent will study the railroad commission question carefully, we think he will be convinced that the good done by a commission is greatly overbalanced by the harm done to the whole State. We are no defenders of the unjust charges sometimes exacted by railroads, but we believe that freight rates can best be adjusted by competition. If we thought that a commission in every Southern State would increase the railroad mileage in each, and thus increase transportation facilities and build up the prosperity of the people, we would advocate a commission as earnestly as possible. In opposing commissions, as well as in all our other work, we are doing it simply because we feel thoroughly satisfied that it is for the good of the South.—Editor MANUFACTURERS' RECORD.

Home Industry Foundry.

MOBILE, ALA., NOV. 17, 1884.

Editor Baltimore Manufacturers' Record:

This establishment was destroyed by fire April 5th, 1884, at a loss of twenty-five thousand dollars. Insurance eight thousand seven hundred dollars. Rebuilt and in full operation October 1st, 1884, at a cost of forty thousand dollars. On 12th inst. fire-box of boiler collapsed with damage to property of eight thousand dollars; no loss of life; started engine and machinery again on 15th inst.; now running about half force; will run full force before 25th inst. About May 1st, 1884, the barrel and box factory and electric light plant of Hurley, Gray & Co., of this city, was burned; loss total; insurance partial; stove manufacturing department is now being rebuilt by a New York firm, superintended by E. R. Upham, with latest improved machinery and Westinghouse engines, of which several will be used.

Very respectfully, GEO. C. HYATT,
Foreman.

Southern Pig Iron in Philadelphia.

[Special correspondence BALTIMORE MANUFACTURERS' RECORD.]

PHILADELPHIA, NOV. 24, 1884.

The Southern pig iron question has been talked about and written about a great deal of late. The facts are about these: Since the opening of the year about 20,000 tons of Southern iron have come into this market, of which 15,000 tons more or less came from Virginia, and about 5,000 tons from Alabama furnaces. Of late the demand for Southern iron in Western markets has fallen off considerably, and hence a market was sought for it here. One party contracted for 5,000 tons conditional on the samples being satisfactory. It was for pipes. The same firm is negotiating for 4,000 tons more Alabama iron. The New England and New York State demand for Southern iron is improving steadily, and with care these irons will gain in favor as they answer the requirements. Besides these, a great deal of Western iron is arriving and is liked. The Gem and Crozier, Va., brands sell here nearly as well as Lehigh irons, perhaps about 50 cents less. A week or ten days ago 270 tons of Virginia iron was divided out among the founders on trial, and the reports are all encouraging. The Lehigh companies are somewhat alarmed at this invasion, and are preparing to reduce cost of coal, ore and labor, in order to reduce cost of iron below Southern and Western. The Pennsylvania Railroad is attempting to fix a \$5.00 rate for pig iron from Alabama here, so as to compete with the rail and water routes. The present demand is largely accidental, and it depends on freight rates, cost at Southern furnace, care in managing furnaces, and enterprise generally to hold what is gained, and gain fresh ground. D.

"THE NEW SOUTH" will be a valuable publication for all who want to know what the South has to offer to the capitalist, the settler, or the tourist.

Tin in North Carolina.

FIRE CREEK, W. VA., NOV. 20, 1884.

Editor Baltimore Manufacturers' Record:

Dear Sir—We have had a discussion among ourselves here, as to whether "tin" had been found in the State of North Carolina in quantity paying to work. I claim that I have noticed in your columns that such was the case, but others say that I am mistaken, that the only tin found in the States in working quantities was in Colorado and Virginia. I may be mistaken in my assertion, however, and agreed to leave it to you. You will confer a great favor if you will advise me on this subject.

Yours truly, G. H. C.

In reply to the above we publish from our issue of October 25, the following: "In Cleveland county, N. C., is a vein of pure cassiterite—the purest vein of tin ore yet found in America. The metal may be chipped out and subjected to fierce heat and pure tin obtained.

The value of the North Carolina mine has been placed at \$200,000, and an offer of \$100,000 cash for the property has been made by English capitalists, who recently had some of the ore assayed, and found it richer than the richest tin ore found in the Cornwall (Eng.) mines. The mine was discovered by a young mineralogist from Morganton, who was hunting for specimens of tourmaline."

Every man in the South should have a copy of **"THE NEW SOUTH."** The price is low. See Prospectus published elsewhere.

Population.

What the South Needs and Manufacturers Will Bring.

The MANUFACTURERS' RECORD has so persistently labored to impress upon Southern people the importance of increasing their non-agricultural population by building up their manufacturing industries—a thing that we believe can only be done by a protective tariff—that we take pleasure in republishing from the Memphis Avalanche a portion of a letter written by Mr. J. T. Trezavant, who shows, as we have so often done, the value of manufactures to the farmers. Mr. Trezavant says:

The following tables, which have been carefully compiled from the census reports of 1880, will afford an interesting story for any one who wishes to learn why cold, bleak and comparatively barren New England so far surpasses sunny, fertile Alabama, Mississippi and Tennessee in population, wealth and political power. We see the people are there, and we know they are neither drawn nor held there by anything tempting in climate or soil. Then what is the magnet that draws and retains them? What is the cause which makes the poor, barren lands of bleak little Rhode Island worth \$90 per acre, while the rich, fertile lands of pleasant Alabama are worth but \$13 per acre?

Louisiana can raise corn, cotton, sugar, rice, in vast abundance, with roots of all kinds, and yet her rich lands are valued at but \$20 per acre in 1880, while those of cold and comparatively unfertile Massachusetts are valued at \$75 per acre.

What causes this enhanced value of such poor lands? It is the presence of hundreds of manufacturing establishments, whose operatives must have, every day, large quantities of poultry, eggs, pigs, milk, butter, cheese, fruits, vegetables; and gardens and small farms all over Massachusetts are so strained to supply this daily demand of factory hands, that land is in great demand. As the quantity cannot be increased, the price goes up, and becomes higher and higher as large cities are built. Would land in Massachusetts be worth anything without people? Would they be worth more than our lands if the population was no denser than it is with us? The South needs others to help her convert her products into wealth—others besides those engaged in raising them; and mills and factories and foundries, and all sorts of manufacturing establishments, will do for her just what they have done for the Eastern and Middle States—just what they are doing for Ohio, Indiana and Illinois now.

Here is a table showing the population of four of the cotton States in 1860, 1870 and 1880, and of Massachusetts, Rhode Island, New York and Pennsylvania for the same years. Others might be embraced, but with like results:

TABLE A.

Population per square mile in 1860, 1870 and 1880, as per census of 1880.

	1860.	1870.	1880.
Alabama.....	18	19	24
Georgia.....	17	20	26
Mississippi.....	17	17	24
Louisiana.....	15	16	20
Massachusetts.....	153	181	221
Rhode Island.....	160	200	254
New York.....	82	92	106
Pennsylvania.....	64	78	95

Here is another table, showing the value of the improved and cultivated land of these States in 1880:

TABLE B.

Acres of improved land in cultivation in 1880, with value per acre.

STATES.	ACRES.	VALUE.
Alabama.....	6,375,000	\$13 00
Georgia.....	8,200,000	14 00
Mississippi.....	5,800,000	18 00
Louisiana.....	9,700,000	20 00
Massachusetts.....	2,130,000	70 00
Rhode Island.....	298,000	90 00
New York.....	17,700,000	60 00
Pennsylvania.....	13,400,000	70 00
Ohio.....	18,000,000	65 00
Tennessee.....	8,500,000	25 00

Ohio and Tennessee have been added to this list, because both have long been regarded as grain states. Why is land in Ohio no more fertile than that in our State, worth \$65 per acre as against \$25 per acre in

Tennessee? Simply and only because Ohio had 78 and Tennessee 35 people to the square mile in 1880; Ohio with hundreds of manufacturing towns and villages whose inhabitants had to call upon farmers, gardeners, milk and butter men, poultry and egg men, fruit and vegetable men, to supply them with the food they needed, but which they had no time to produce. As stated at first, the South needs more whites; more of that industrious, educated, thrifty, intelligent people who have so added to the wealth and power of the eastern, middle and northwestern States; and the more factories, mills, foundries and workshops we have the more of that population we shall have. Let any one go to Milburn's machine shops and see what a busy town has sprung up around them and the Pioneer cotton mills within a year. With them has come a new demand on the farmers and gardeners for much more than they sold there before those works were established; and every good citizen in Shelby county would like to see works like these multiplied tenfold here and around here. These works are now in their infancy, not able to stand up against strong competition; and to let England bring into this country, on a "free trade" list, such articles as these works now can make with a little protection would simply be to sweep them all away. Mr. Young says:

"From 1850 to 1860 we had what was known as a low tariff, and during that decade the farm values of the country increased 103 per cent, while in the following decade they only increased 11 per cent., and from 1870 to 1880 but 37 per cent."

He cannot be ignorant that from 1860 to 1870 was the war decade of the South, and any increase in values at all is surprising. But his own statement shows that "the prosperity" of the South has not been "swept away," for he admits an increase in values from 11 to 37 per cent. in the decade of 1880 over that of 1870—only about 350 per cent. of increased "prosperity" in ten years. Mr. Young should heed his figures, as they lead him into lamentable "blunders." He very justly complained of \$100,000,000 of coin being accumulated in the national treasury. Why does he not urge the abolition of the internal revenue tax on tobacco and whisky? Why does he not do his district justice in supporting the educational bill by which the South would get a pretty big slice of the \$70,000,000 to be divided among the States to educate the illiterate whites and blacks? Did he touch these two questions in any of his speeches in or out of Congress?

The tariff is a local question and Mr. Young should consult the interests of his constituents, whose enterprise and money build works which benefit thousands, while robbing no man of a dime or a meal. He is supposed to represent them and not himself.

MR. EGAN, president of the Egan Co., Cincinnati, Ohio, writes: "The business outlook in the wood-working machinery line is only fair to middling. The manufacturers of any kind of wood work have a chance now, from all we see of the condition of things, to put in the latest improved improved machines at very low figures. We have managed to keep our force of men going, but it has only been by hard work, and making new improved machines with the latest improvements and making prices low. Why, we are selling a better band saw now for \$125 than was ever sold before for \$250; also, planers, sand paper machines, scroll saws, tenon, friezing and moulding machines, self-feed rip and cross-cut saws, and many others of our latest improved and standard machines are put right down. Any one can now afford to throw away or sell the old clumsy, worn-out or inferior make of machines, and put in the latest improvements in wood-cutting machines, and be prepared to reap the benefits of their foresight, when the trade and boom commences, which is bound to come very soon."

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The Woodward Iron Co., of Wheeling, Ala., will undergo extensive improvements and considerable machinery has already been received for that purpose.

E. G. Stevens and F. L. Fenton, of Boston, have purchased fire brick works recently finished at Birmingham, Ala., and will put them in operation. Expect also to erect iron pipe works.

H. F. Debardeleben, of Birmingham, Ala., has contracts for a 15 mile railroad to be constructed from Birmingham to his Cahaba coal mines.

J. B. Wilkinson, Lauderdale, Ala., has partly rebuilt his saw and grist mill lately burned.

Judge Walker, Columbia, Ala., is erecting a bagging factory.

The Louisville & Nashville Railroad has commenced laying the foundation for a large freight depot at Birmingham, Ala.

It is stated that Gen. Samuel Thomas, of Pennsylvania, will shortly begin the development of 20,000 acres of coal and iron ore land which he owns in Alabama.

The Coosa Canal Company has been organized at Wetumpka, Ala., with H. G. McCall, president. Capital \$1,000,000. Will build canal from Wetumpka to a point near Gray's Ferry.

The Mobile Steam Laundry, Mobile, Ala., has added machinery to double its capacity.

ARKANSAS.

Monroe McCoy, Rondo, Ark., will rebuild ginnery lately burned.

Stewart & Hover, Rondo, Ark., have nearly finished their grist mill and gin.

The Crystal Ice Co., of Little Rock, Ark., lately organized, will commence building their factory immediately at Argenta, near Little Rock.

FLORIDA.

Macy & Co., who, as previously reported, are building gas works in Key West, Fla., expect to complete in 60 days.

Vincent & Son, Palatka, Fla., have started up their planing mill previously reported.

Harvey & Hillyard, Pensacola, Fla., who were reported some time ago as preparing to rebuild their carriage, sash and door factory, have commenced work on the buildings and will complete them soon as possible.

T. Brigham Bishop has purchased ground in Palatka, Fla., on which to build a large hotel.

The Thompson-Houston electric light will be introduced into Jacksonville, Fla., the machinery having been ordered.

The new Putnam hotel, to be built at Palatka, Fla., in place of the one lately burned, will have 350 rooms and cost \$300,000.

GEORGIA.

John T. Goodman, Gladesville, Ga., has rebuilt his ginnery burned some time since and will also rebuild his grist mill.

Mr. G. H. Rawlins, Rome, Ga., would like to receive catalogues of manufacturers of machinery for hosiery and knit underwear.

Swift & Hamburger, Waymanville, Ga., are putting a large amount of machinery into their cotton mill with a view to increasing its capacity.

H. F. Griffin, Jeffersonville, Ga., whose mill and gin were burned early in November, is rebuilding.

T. C. Mitchell and others are working up the company to build gas works in Thomasville, Ga., previously reported.

J. L. Chambers will erect a saw mill near Rome, Ga.

W. F. Bailey & Co., Bartow, Ga., whose saw and shingle mill was lately burned are rebuilding.

Col. V. L. Robertson, of Nacoochee, Ga., agent of Col. James Jaquess and Dr. James McGeary, of London, Eng., has leased the Sawnee mountain gold mining property, near Cumming, Ga. Will begin operations in a few weeks.

KENTUCKY.

Davis Woolery, Antioch Mills, Ky., is building a new mill.

Ed. Fulton & Co., Aberdeen, Ky., have purchased the Aberdeen Flour Mills and put in large amount of machinery.

Stephens, Taft & Co. are building a saw mill near Lynn, Ky., and Kinney & Kouns will put up one near the same place.

LOUISIANA.

The Monroe (cotton seed) Oil Mill, Monroe, La., reported burned last week with loss of \$100,000, will rebuild at once.

Foret Bros' sugar house at Thibodaux, La., badly damaged by storm.

C. Minnigerode, Jr., and others, New Orleans, La., have organized a company, capital \$65,000, to build a street railroad at once.

MARYLAND.

Henry Reckord & Son, of Reckord, Md., whose flour mill was burned some months ago, will rebuild in the spring.

MISSISSIPPI.

About 100 hands are employed in building the shops of the New Orleans and North-eastern Railroad at Meridian, Miss., previously reported. The main building is 317 feet long. These works will be completed this winter.

E. Moreton, of Chicago, lately reported as intending to build a furniture factory in Yazoo, Miss., has purchased the ground and will erect a large saw mill and then the furniture factory. Has ordered saw mill machinery.

Jackson, Miss., will probably build water works.

A machine room and round house are being built at Vicksburg, Miss., by the Valley Railroad.

Robert Elliott, of the Memphis Broom Factory, will probably start a broom factory at Vicksburg, Miss.

NORTH CAROLINA.

Bevill & Co.'s tobacco factory at Greensboro, N. C., will be 60x150. Good progress is being made on it.

N. W. Beeson & Co., Abotts Creek, N. C., contemplate selling their mills and shops and removing to Lexington, N. C.

E. T. Reid, H. R. Hicks and A. Wilson have purchased the furniture factory at Old Fort, N. C. and will remove it to Morganton, N. C., enlarge it and put in new machinery.

Hawn, Fry & Miller, Hickory, N. C., have commenced the erection of a planing mill and sash and door factory.

Cassiday & Galley contemplate erecting a wagon factory in Raleigh, N. C.

J. S. Tomlinson of Hickory, N. C., is contemplating the establishment of a smoking tobacco factory in Raleigh, N. C.

SOUTH CAROLINA.

Wm. F. Clausen, of Mars Bluff, S. C., has erected large furnace for burning tiles.

TENNESSEE.

A. M. Stevens, Dyersburg, Tenn., has nearly completed his 100 barrel a day roller flour mill and will soon build a planing mill.

J. E. Murray, of Ohio, has decided to erect extensive carriage and wagon works at Chattanooga, Tenn., in the spring.

The flour mill of W. J. Parrott & Son, Strawberry Plains, Tenn., lately burned, will probably be rebuilt by another firm. Parrott & Son can give particulars.

S. T. Giles, Chattanooga, Tenn., has been negotiating for a site for agricultural machinery works.

A shoe factory will probably be started in Chattanooga, Tenn., by a Massachusetts man.

TEXAS.

Chicago capitalists are examining granite quarries at Burnet, Texas, with a view of purchasing.

The Houston & Texas Central Railroad will extend its lines from Albany, Texas, to connect with the Denver & New Orleans Railroad.

VIRGINIA.

The Virginia Tin Mining and Manufacturing Co., the organization of which was previously reported, will push the work of mining tin ore in Rock Bridge county, Va. Mr. Edgar Whitehead of Amherst Court House, Va., is president; capital \$600,000.

The Edinburg Manufacturing Co., of Edinburg, Va., has been organized (with capital reported at \$200,000 cash.) to manufacture agricultural implements, &c. Now erecting works; will employ 100 to 200 hands.

John Carmichael, town engineer, Lexington, Va., invites proposals till December 15 for 140 tons of 6-inch cast iron water pipe in lengths of 12 feet. Pipe to be delivered in March and April, 1885. Particulars furnished upon application.

Liberty, Va., is figuring on water works.

Charlottesville, Va., will decide this week whether or not to spend \$85,000 in building water works.

WEST VIRGINIA.

Fegans & Haines, Rippon, W. Va., have rebuilt their flour mill burned some months ago and are now building a saw mill.

E. R. Davenport has organized the company that is to build water works in Charleston, W. Va., previously reported.

The Belmont Blast Furnace, Wheeling, W. Va., has blown out to be relined.

An effort is being made in Morgantown, W. Va., to establish gas works.

The Union Railroad and Depot Company has been chartered at Wheeling, W. Va., to build a depot and approaches. Capital \$50,000.

BURNED.

Saw mill of J. M. Dorn, McCormick, S. C.

Sugar house of Oliver Beirne on the Arment plantation, St. James Parish, La.—Loss \$150,000.

Grist mill and ginnery of L. W. Tyson, White Hall, Ala.

Saw, grist and wool mill of the Trappist Monks, near New Haven, Ky. Loss \$30,000.

Distillery of Coon Hollow Distillery Co., Newhope, Ky.

Ginnery of Walter Bates, Batesville, Ala. Loss \$6,000.

A fire in Hickman, Ky., burned part of the works of the Hickman Furniture Co. and several other buildings. Aggregate loss \$125,000.

Tannery of J. O. Cauble, Greenville, S. C.; loss on machinery, &c., \$2,000.

The gin and saw mill of John Sikes, of Oconee county, Ga.

Barrel factory of Rogerson & Darden at Edenton, N. C. Loss \$2,500.

A manufactory has been destroyed at Franklin, Ky.

The Cummer Engine Co. report that the Jonathan Mills Flour Dresser, manufactured by them, is meeting with excellent success. They are selling a great many of them, and are receiving a large number of repeated orders. They are also quietly placing a number of the "Finch" Rolls, which are looked upon by all who have investigated them as a very superior roll. The Cummer Engine Co. have just been awarded the contract for the refrigerating plant for the brewery of Rothaker Bros. & Thomas, of Philadelphia. This comprises two of their improved refrigerating machines, two condensers, etc., etc. They have also entered into contract with Henry Zeltner, of Morrisania, New York, for a large refrigerating plant, including two machines, two condensers, one of their 67 horse power engines, etc., etc., and have received an order for an engine of the same size from the Montgomery Milling Co., Montgomery, Mo. Among the recent shipments of the Cummer Co. are the following: A 95 horse power engine for the flouring mills of Amos Bros., Syracuse, N. Y.; two engines, 67 horse power each, for the Citizens' Electric Light Co., of Akron, Ohio; a 130 horse power engine for the Upton Manufacturing Co., Port Huron, Mich.; one of 170 horse power for the cotton mills of the Hadley Co., Holyoke, Mass.; an engine of 287 horse power for the railroad shops of the New York, West Shore and Buffalo Railroad Co., at Frankfort, N. Y., and a 170 horse power engine for the cotton mills of W. H. Cherry & Co., Mountain Mills, Ala.

Everybody should buy a copy of "THE NEW SOUTH." It will be worth many times its cost.

THE CENTURY for December has for its frontispiece a profile portrait of General Grant, engraved from a recently found photograph taken in 1862. It accompanies the second of the papers on the Civil War, "The Capture of Fort Donelson," which is contributed by General Lew Wallace, who commanded the Third Division of Grant's army during the siege. A score of illustrations present views on the field, portraits of officers, maps, and (not the least interesting) an autograph copy, recently made by General Grant, of his famous "Unconditional Surrender" dispatch to General Buckner. The "Recollections of a Private" are continued, with descriptions of the early "Campaigning to no Purpose" along the Potomac, with illustrations. In both papers the drawings are nearly all from photographs.

The fiction consists of "An Adventure of Huckleberry Finn, with an account of the famous Grangerford-Shepherdson Feud," by Mark Twain, being a tale of life along the Mississippi River, some of the types being represented in the sketches of D. W. Kemble; the first part of a novelette, in three parts, "The Knight of the Black Forest," by Miss Grace Denio Litchfield—a story of American girls in Europe, which is illustrated by Mrs. Mary Hallowell Foote; and the second part of Mr. Howell's new novel, "The Rise of Silas Lapham."

A READER of the MANUFACTURERS' RECORD, in a growing Southern town, writes to inquire if we know of any one who would like to make an investment in mineral and timber land or real estate at once in that section. He says: "There are three lines of railroads being built to this place, and if any one wishes to do anything in this line now is the time. Will send plans or plats of the lands to any one wishing to invest. The timber is the finest of hickory, oak, ash, poplar, &c."

LOCKWOOD, GREENE & CO.

MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old

Copper Roofing.

PHILADELPHIA, Nov. 18, 1884.

DEAR SIR:

An article has lately appeared in the Mining Gazette in reference to the advisability of architects, builders, etc., using copper roofs, and urging their use on account of durability and the present low price of manufactured copper, basing their statements on the price of Ingot copper and the cost of manufacturing it into sheet copper at three cents a pound, without regard to the thickness of the sheets manufactured. This article has been copied by many of the leading journals devoted to architecture and building throughout the country, and has no doubt attracted much attention from those interested in the subject. We have read it carefully, and it is so misleading in its statements, so inaccurate in its deductions, and such absurd prices as to the cost of manufactured copper are given, that we take the liberty of correcting some of these statements as to not only why in our opinion copper roofs generally in this country cannot take the place of other material, not altogether because the great expense, but unless put on so as to avoid the great expansion and contraction, the roof will be utterly useless for the purpose for which it is intended. Although this firm is not engaged in the roofing business, it has within the past ten years, we believe, supplied a very large portion of the sheet copper that has been furnished for the different government and state buildings, besides large quantities of sheet copper for gutters, valleys, etc., to the trade in general, hence we do not write this article without some knowledge of the facts of the case.

We do not doubt all that is said in regard to durability of copper roofing, nor is there any question in our minds as to the vast number of inferior roofs which have been and are being put on at the present day. We do not hesitate to assert that the fault lies not only with owners of property, who are not willing to pay a good price for a good roof, but with architects who, when specifying tinplates, simply specify IC or IX best charcoal roofing, which in reality means nothing. The great expansion and contraction of sheet copper is such that if a copper roof is put on in the ordinary way a tin roof is, say of 16 ounce copper, it cannot be secured by solder, nails or screws that will hold any length of time, and make a secure roof. The Government formerly used 16 ounce copper on all public buildings, and though these roofs were put on at the time by competent firms, we have it from a reliable authority that the expenses of repairs on Government roofs up to the present time will show a loss to the Government of so much money that the public at large would not credit same,—in fact it has been asserted that in some cases the weight of the solder used in patching these copper roofs to keep them from leaking would amount in weight to almost the original weight of the sheet copper put on. The government has, after a series of experiments, come to the conclusion to use no copper heavier than ten ounce for the body of the roof. Amongst all the patents, of which there are many putting on copper roofs, we believe there is only one so far, that can practically make a first class copper roof, by which the edges of the sheets are positively fixed at frequent intervals, and the sheets of ten ounce copper being light, will buckle backward or forward over the whole roof.—By this patent the expansion is thus distributed over the whole roof, and between any contiguous fixed points is so light that it is scarcely appreciable. The size of the sheet used should not be more than 24 inches wide and 48 inches long; about three inches off the width is required for grooving.

We understand by this patent that it would cost about fifteen cents per square foot to lay this roof, over and above the price of the material; or take ten ounce copper at the market price to-day, and we hardly

think it possible to lay a roof at less expense than 36 cents per square foot, or over double the amount stated by the Mining Gazette.—This would be nearly the four times the cost of using Gilbertson's Old Method Roofing tin, which we believe to-day to be the heaviest coated roofing plate in the market, and is consequently taken by us as the basis of the best roofing plate that can be used as to the comparative cost between tin and copper. While it is true that even an extra coated plate like Old Method must be painted from time to time, yet, even taking into consideration the cost of painting every few years, the interest alone on the original amount expended for a copper roof over tin, would in the course of many years be a very important item. Our figures for putting on a copper roof are based on plain copper, while the Government uses copper tinned on both sides, which adds a cost of five cents per square foot, but we do not believe that there is any necessity of tinning a roof, unless used in such States as Texas and other places where they are more or less dependent for water caught from the roof. Though sheet copper is largely used for gutters, valleys, etc., we think that you will find upon investigation that great difficulty is experienced by the most competent houses in making durable jobs of sheet copper; in fact it is almost impossible to make long lengths of some gutters without breakages soon occurring. We have in our city quite a number of buildings that have been roofed many years with sheet copper, but we are informed that there are constant repairs needed on these roofs. There is no question in our mind, as to the durability of copper and that a copper roof properly put on is the most lasting one. Under the patent referred to we have no doubt that a perfect roof can be had, yet as to the question of cheapness as regards other roofs, it has only been our intention in this article to point out why the statements made by the Mining Gazette are misleading to architects and builders, and there is no reason why the facts, as we believe them to exist, should not be stated at once, to save further misapprehension as to the correctness of the statements made in the article referred to.

We have given the subject of copper roofing our personal attention for many years, and if any of the statements made by us are incorrect, we trust that those who have had a practical experience in this line will come forward and give you their views on this subject. Yours truly, MERCHANT & CO.

"THE NEW SOUTH" is an accurate and impartial description of the manufacturing, mineral and agricultural resources of the Southern States. See Prospectus on another page.

THE New Automatic Knife Grinder, manufactured by The Egan Company, of Cincinnati, Ohio, has met with the greatest success among all classes of wood working establishments. They recently sent one to a large agricultural implement factory and have just received the following letter in regard to it:

OFFICE OF P. WEYHRICH & Co.
PEKIN, ILL., Nov. 1, 1884.

We will say in regard to the grinder that it is running right along and grinding about 100 knives per day. We now have the second wheel on the machine and it is doing still more satisfactory work, and we are free to admit that we believe that the principles of the machine are correct. (Signed.)

P. WEYHRICH & Co.

The above firm have a great many knives to grind for agricultural implements and their varied experience with different kinds of grinders lends additional weight to their endorsement of this new grinder.

Everybody should buy a copy of "THE NEW SOUTH." It will be worth many times its cost.

Detrick & Harvey's New Works.

Messrs. Detrick & Harvey, of this city, are making good progress in the erection of their large machine shops, mention of which has already been made in the MANUFACTURERS' RECORD. The location selected for their works, Preston street, east of Jones Falls, gives them ample room and excellent shipping facilities. They are erecting two buildings, one for the main shop, 116x60 feet, and the blacksmith shop. The main building is two stories and pattern loft, and very similar in design and construction to one of the Yale & Towne shops, at Stamford, Conn. The windows on the first floor are 12 feet high with 4 feet of wall between them. Two rows of posts run the whole length of the building, leaving a space between them of 24 feet, in which runs a Yale & Towne traveling crane. The floor will be of oak laid on concrete 8 inches thick, while the second floor will be entirely free from posts, the roof being self-supporting. The entire structure has been erected with a view to light and air so necessary to a machine shop, and with complete facilities for handling heavy work. Messrs. Detrick & Harvey expect to occupy these shops by January 15, when they will have superior facilities for building their specialties—the Single Post Planer and Heavy Milling Machines, as well as for the construction and repairing of special and fine machinery. In connection with the S. A. Forsaith & Co.'s exhibit at New Orleans, Detrick & Harvey will show one of their 20-inch Single Post Planers in operation. One of the 30-inch Single Post Planers made by this firm has just been sold to the Kitson Machine Co., of Lowell, Mass.

"THE NEW SOUTH" will be a valuable publication for all who want to know what the South has to offer to the capitalist, the settler, or the tourist.

Literary Notes.

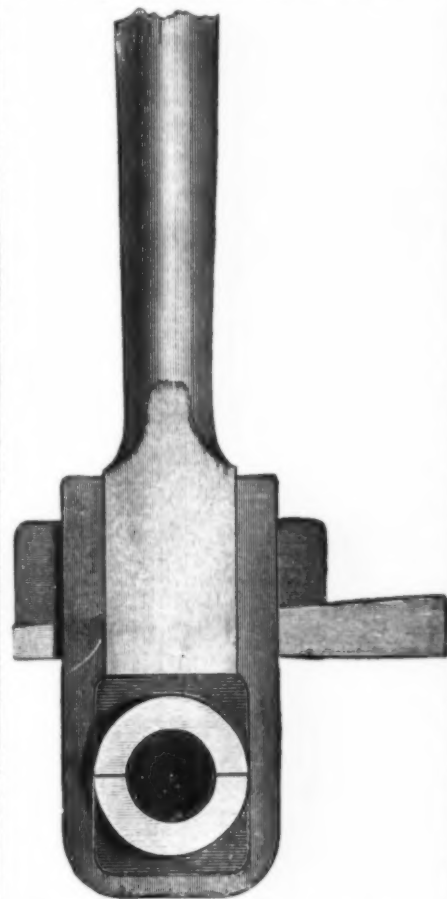
THE Popular Science Monthly for December contains The Reformation in Time-Keeping, by W. F. Allen, (illustrated); American Aspects of Anthropology, by E. B. Tylor, F. R. S.; School-Culture of the Observing Faculties, by J. C. Glashaw; Queer Flowers, by Grant Allen; Alcoholic Trance, by T. D. Crothers, M. D.; The Problem of Universal Suffrage, by Alfred Fouillee; Cannibalism, as a Custom, by A. St. Johnston; Starvation: Its Moral and Physical Effects, by Nathaniel E. Davies, L. R. C. P.; The Chemistry of Cookery, by W. Mattieu Williams; The Perils of Rapid Civilization, by C. F. Withington, M. D.; Religion and the Doctrine of Evolution, by Frederick Temple, D. D.; Liquefaction of the Elementary Gases, by Jules Jamin; The Oil Supply of the World, II: Oddities of Animal Character; Biographical Sketch of Edward B. Tylor, (with portrait); Correspondence; Editor's Table; Science in School Management: The Abuse of Political Power; A Jewish Explanation of Jewish Success. Literary Notices; Popular Miscellany; Notes.

Important to Southerners.

Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 600 elegantly furnished rooms \$1 and upwards per day. Restaurant the best and cheapest in the city. Families can live better for less money at this hotel than at any other first-class hotel in the city. †

Strap Joints.

The tendency of machine shops to confine their operations to special lines of work has been more and more marked of late years. By using machinery specially adapted for a certain class of work, such articles as taps, reamers, &c., which were formerly made by the men who used them, are now turned out in large quantities and a greatly reduced cost. And so this year manufacturers of machinery buy certain parts of their machines which last year they made, and this tendency is growing to such an extent that some one has been bold enough to predict that the day will come when every part of a locomotive engine will be carried in stock, so that when the builders get an order for ten or more engines, they will only have to buy the parts and put them together. But although this may be rather a "wild"



prediction as regards a locomotive, it is probably not far from the truth as regards the smaller stationary engines. The accompanying cut illustrates the latest advance in this direction in the shape of a Strap Joint or stub end. They are made in various sizes, and it is claimed the net cost to the engine builder is far below what they would cost him to make, even if his facilities are good. They are said to be made of the best material, (nothing but pure copper and tin being used in the boxes,) and are accurately fitted.

In these days of close competition it may be worth while, mechanics, to investigate this subject. These goods are being introduced by Messrs. Cooke & Co., 22 Courtland street, New York City.

Every man in the South should have a copy of "THE NEW SOUTH." The price is low. See Prospectus published elsewhere.

AMONG the prominent hotels of the country must be noted The Palace at Cincinnati, Ohio. It is a magnificent stone structure recently built, superbly finished and furnished throughout, and provided with modern devices for the comfort and convenience of guests. It is under efficient management, and possesses the advantages of a hotel, with the comforts of a home. The proprietor gives personal supervision to all the details of management, and is careful to see that his guests have their wants properly attended to. †

The Bridgeport Interchangeable Lathes and Lipe Patent Tool Post.

The lathe herewith illustrated is one lately brought out by the Bridgeport Machine Tool Works, Bridgeport, Conn., of which E. P. Bullard, 14 Dey street, New York, is proprietor.

In 1867 Mr. Bullard conceived the idea of making an interchangeable lathe which, for good and sufficient reasons, he was unable to carry out until 1880. In July of that year he organized the Bridgeport Machine Tool Works in connection with other parties, the object being to develop the "interchangeable plan" as applied to the manufacture of lathes, making a specialty of the 16-inch lathe. January 1, 1882, Mr. Bullard became sole proprietor of the works, which were increased and valuable real estate purchased with a view of making the works a permanency. During that year all of the patterns were remodeled and an entire new outfit of special tools and fixtures was produced and a higher standard of workman-

Schenectady, N. Y.; the Lidgerwood Manufacturing Co., of New York City and Glasgow, Scotland; the Watts, Campbell Co., of Newark, N. J.; the Brush Electric Light Co., of Cleveland, Ohio; The Holyoke Water Power Co., of Holyoke, Mass.; Morgan's Louisiana and Texas Railway & Transportation Co., of New Orleans; Valiente & Co., San Salvador, W. I.; The Eames Vacuum Brake Co., of Paris, France; and many others, are large patrons of these works, making a total of nearly three hundred and fifty lathes made and sold at present date, from a shop starting in August, 1880, with an area of 30x50.

The manufacturers give the following concise description of the Twenty-one Inch Lathe, which is of unusual weight, and is designed especially for railroad and engine shops; "will take heavy cuts on any work coming within its range. It has five section cone, the largest of which is 13-inch diameter, for 3-inch belt. Gears are large and of ample face. Spindle is of hammered steel, boxes of best composition metal. Diameter of front bearing, 3 1/4 inches by 6 inches

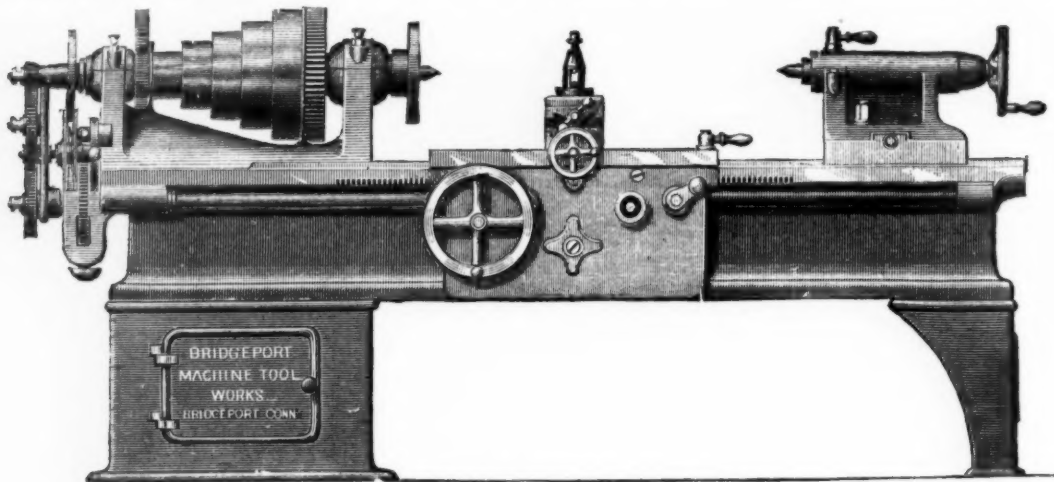
disc. The feed is reversed by a simple mechanical movement in the apron, and convenient to the operator."

The Lipe Tool Post, mentioned in the foregoing description and shown in the cut, is arranged so as to fit into a socket, which is moved by the cross screw on the carriage. It is adjustable for regulating height of tool by means of the screw on the side. It can be swung around so as to use a boring tool. The tool can be used in the center or at the side, as shown in cut. It is clamped in the socket by means of screw, the socket being slit to below the center. The Lipe Tool Post can be instantly removed and a compound rest substituted.

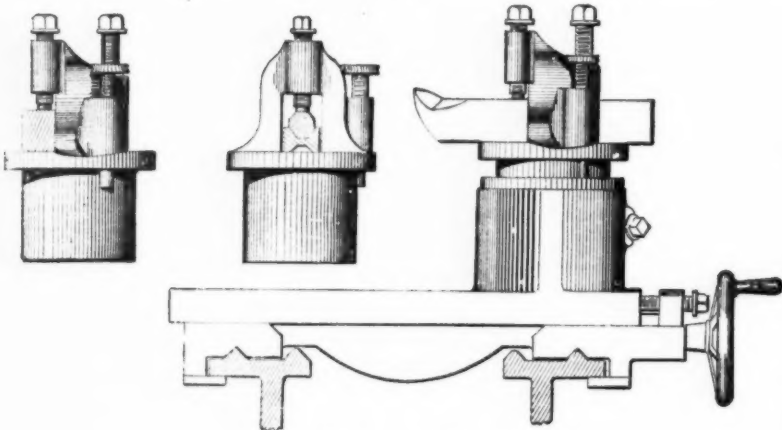
List of Patents

The following Patents were granted to citizens of the Southern States, bearing date Nov. 18, 1884. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Brotherhood, Fred., Charleston, S. C. Drier. 308,237
Burton, J. F., Booneville, Ark. Buckle fastener. 308,130



THE BRIDGEPORT INTERCHANGEABLE LATHE.



THE LIPE PATENT TOOL POST.

ship reached. The success which followed is well known to the mechanical world, the Bridgeport Lathe now being recognized as a "standard tool," not only at home, but abroad.

Mr. Bullard numbers among his customers such universally well known firms as the Westinghouse companies of Pittsburgh, Pa., who have in use one hundred and two of his 16-inch lathe, and five of a more recently constructed pattern, viz: the 21-inch, herewith illustrated; Messrs. Eaton, Cole & Burnham Co., of New York City and Bridgeport, Conn.; The Calumet & Hecla Mining Co., of Calumet, Mich., well known as the largest producers of copper in the world; the Singer Manufacturing Co., of Elizabethport, N. J., and Glasgow, Scotland; the Farrell Foundry & Machine Co., of Waterbury, Conn.; the Blake & Johnson Manufacturing Co., of same place; Jno. T. Noyes Manufacturing Co., of Buffalo, N. Y.; D. M. Osborne & Co., of Auburn, N. Y.; the New York Locomotive Co., of Rome, N. Y.; Cooke Locomotive Works, of Paterson, N. J.; Schenectady Locomotive Works, of

long. The tail stock is heavy and well braced, has long bearing on bed. The carriage is thirty inches long, gibbed front and back. Bears full length on the ways, and is carefully scraped to a fit. Sliding tool block is 18 inches long, has adjustable taper wedge entire length, and will face full swing of lathe. The compound rest and Lipe Patent Tool Post can be used interchangeably with each other in the sliding block or on the wing of the carriage for turning full swing of the lathe. This arrangement of compound rest and tool post is an entirely new feature, and will be found very convenient. The leading and actuating screws, and all shafts and studs, are of machinery steel. The leading screw is splined, and operates the lateral and power cross feeds by independent worm and frictional gearing. By turning the star-wheel to the right the lateral feed is engaged. Turning the same to the left locks the cross feed; by this device all possibility of the two feeds being locked at the same time is avoided. All nuts are case hardened. The feed has great range from fine to coarse, being driven by the well-known Seller's friction

that more nearly represent the actual prices paid, though it is believed by some that prices will be strengthened on account of reduced production. We quote:

Ref. Bar Iron, 1 to 6 3/4 to 1.....	1.80	1.9c
" " 1 to 4 1/2 to 1.....	1.80	1.9c
" " 3/4 to 2, round and		
square.....	1.80	1.9c
Hoop Iron, 1 1/2 wide and upward ..	2 1/2	2 1/2 c
Band Iron, from 1 1/4 to 6 in. wide...	2 1/2	2.6c
Horseshoe Iron.....	3.30	3.3c
Norway Nail Rods.....	5	5 1/2 c
Black Diamond Cast Steel.....	10	11 c
Machinery Steel.....	4 1/2	4 1/2 c
Spring Steel.....	3 1/2	4 c
Common Horse Nails.....	10	11 c
Railroad Spikes, 5 1/2 x 16.....	2.50	2.6c

Pig iron shows no improvement either in demand or prices, and we repeat former quotations:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$28.00	\$29.00
Virginia C. B. Charcoal Wheel Iron....	28.00	—
Anthracite, No. 1.....	20.00	\$23.00
" " 2.....	20.00	\$21.00
" " 3.....	18.00	\$20.00
" Mottled and White.....	16.00	\$17.00

HARDWARE.

Trade has continued moderately good during the week, with a steady improvement in the demand from the South, though some buyers have been holding off and purchasing only in small lots as needed for immediate wants. There is considerable cutting in prices, though this will probably stop if the demand continues to increase. All of the plane manufacturers in the country have combined as the Plane Manufacturers' Union and have advanced prices, the new discounts being 15% on fancy planes, 20% on first quality bench planes, 25% on second quality bench planes, and 20% on plane irons, all subject to 2% for cash 10 days. In the former combination only three companies were represented, but all five—the Auburn Tool Co., Greenfield Tool Co., Ohio Tool Co., Sandusky Tool Co. and H. Chapins' Sons—are in the new organization. Mr. Arthur Emory, German street, Baltimore, is agent for all of these companies.

The demand for nails has not materially increased and prices are as last quoted: \$2.00 @ \$2.10 according to quality and quantity, but the outside factories, which a few weeks ago were pressing inferior nails at \$2.00, appear to be out of the market, and good nails are quoted \$2.10.

President E. D. Shelton, of the Shelton Tack Company, says that the tack pool is now nearly broken. He remarked this week: "The combination must burst pretty soon and all of us go into the market on an equal footing. At present there is a large tack factory building in Cleveland, which is in the center of the Western trade of this combination. This does not look encouraging." Business is dull in the tack trade. Mr. Shelton says that the cause is overproduction, there being three times too much machinery; and finally he attributes much of the dullness to the combination of tack-making concerns which for years spent money in purchasing small manufactories for the purpose of controlling the market.

The following circular has been issued:

NEW YORK, November 22d, 1884.

Owing to the unexpected and rapid advance in quicksilver, the Associated Manufacturers of Quicksilver Vermilion have advanced the price as follows:

Bulk, kegs, 100 lbs. and over, 55c. per lb.
Bags, 30 and 50 lbs., - - - 56c. "

Less 1% to direct purchasers.

Subject to change without advice. We do not guarantee price against decline, and can make no allowance for stock on hand in case of a reduction in price.

D. F. TIEMANN & CO.

Philadelphia Iron Market.

PHILADELPHIA, Nov. 25, 1884.

The depressing influences are still at work in the iron trade, and all the business transacted is at a shading from former figures.—Southern forge iron is being delivered here at \$16 to \$16.25; foundry at \$17 to \$19.

Read the Prospectus of "THE NEW SOUTH," in the advertising columns.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD,)
BALTIMORE, Nov. 26, 1884.)

There is considerable depression in manufacturing interests, but it is believed to be much less severe than the highly colored reports of the daily papers would indicate.—In fact in some directions there are evident signs of improvement, and quite a number of reports from various sections indicate a much better feeling in industrial matters.—The outlook is, we believe, on the whole favorable to a fairly good winter trade, with still brighter prospects for the spring business.

The manufactured iron market continues dull, and we reduce quotations to figures

Bleached W. Sperm oil.....	85 1/2
Nat. " " "	92 1/2
B. W. Elephant oil.....	75 1/2
" " Whale oil.....	70 1/2
Prime Lard oil.....	65 1/2
Extra No. 1 Lard oil.....	63 1/2
Lubricating oils.....	12 1/2

Miners' oil.....	50@	55
W. Pressed Fish oil.....	42@	—
Neatsfoot oil.....	65@	80
Steam-refined Cylinder oil.....	40@	55
Best Filtered ".....	65@	—
Signal oil.....	60@	70
Paraffine.....	12@	20

SUNDRIES.

Benzine.....	gal., 8@10c
Turpentine.....	gal., 3 3/4c
Chalk, block.....	3c
Dryer patent Am'n.....	ass't'd cans, 9c; keg, 7c
Frostings.....	40c
Glue, white.....	20@36c
Glue, sheet.....	14@20c
Glue, ordinary.....	9@12
Glaziers' Points, zinc.....	8c
Gum, Copal.....	36c
Gum, Damar.....	25c

BRASS.

ROLL AND SHEET BRASS.

Brown & Sharpe's Gauge the Standard.
New List, Jan. 17, 1884.
Dis 10@80%

COMMON HIGH BRASS.	2	10	12	14	16	18
Wider than 1/2 in. and including.....	10	12	14	16	18	20
To No. 20, inclusive.....	.21	.22	.23	.25	.27	.29
Nos. 21, 22, 23 and 24.....	.32	.33	.34	.36	.38	.40
Nos. 25 and 26.....	.42	.43	.44	.46	.48	.50
Nos. 27 and 28.....	.52	.53	.54	.56	.58	.60
Add 9 cts. per lb. for sheets cut to particular widths and lengths.....						
Add 1/2 c. per lb. additional on each number thinner than Nos. 28 to 38 inclusive.....						
Brass thinner than No. 38 is Platers' Brass.....						
at.....						
Printers' rules.....						
Printers' Sheets and Plates cut to particular sizes and lengths to No. 20, inclusive.....						
Brazing, Spinning and Spring Brass, one cent more than common High Brass.....						
Low Brass four cts. per lb. more than common High Brass.....						
Gilding, Oreide and Bronze seven cts. per lb. more than common High Brass.....						

SLITTING METAL.

Add to list as follows:

Over 1/2 in. to 2 in., inclusive, Nos. 12 to 20, inclusive.....	1/4c.
Over 1/4 in. to 1/2 in., inclusive, Nos. 12 to 20, inclusive.....	1/4c.
1/4 in. and narrower, not less than.....	4
Over 1/4 in. to 2 in., inclusive, Nos. 21 to 28, inclusive.....	1
Over 1/4 in. to 1/2 in., inclusive, Nos. 21 to 28, inclusive.....	2
1/4 in. and narrower, Nos. 21 to 28, inclusive, not less than.....	6
Over 1/2 in. to 2 in., inclusive, Nos. 29 to 32, inclusive.....	1 1/2
Over 1/4 in. to 1/2 in., inclusive, Nos. 29 to 32, inclusive.....	3
1/4 in. and narrower, Nos. 29 to 32, inclusive, not less than.....	12
Over 1/2 in. to 2 in., inclusive, No. 33 and thinner.....	3
Over 1/4 in. to 1/2 in., inclusive, No. 33 and thinner.....	6
1/4 in. and narrower, No. 33 and thinner, not less than.....	18
Slit Metal cut to particular lengths, per lb. additional.....	5

PLATERS' OR GOLD METAL.

In bars.....	40c.
In ingots.....	43c.
In ingots, planed or polished.....	46c.

BRASS TUBING.

Brown & Sharpe's Gauge the Standard for all Tubing.....	Per lb.
Plain, to No. 20, inclusive.....	35
Above 5-16 inch to 3 inches, inclusive.....	45
Plain, to No. 21, above 3 inches.....	45
" 5-16 inch to No. 20.....	60
" 3-16 inch.....	1.00
" 1/2 inch.....	1.50
Bronze Tubing 3 cents per pound more than Brass. Nos. 21, 22, 23, two cents advance on list for each number.....	
Nos. 24, 25, 26, four cents advance on list for each number.....	
Above No. 26, special rates.....	
All Mandrel-drawn Tubes, 3/8 inch and above, five cents advance on list prices.....	
All Mandrel-drawn Tubes under 3/8 inch, twenty-five cents per pound advance on list prices.....	
Fancy Tubing to No. 20.....	\$0.43
English, Scotch and Extra Pattern Fancy Tubing to No. 20.....	48
Tubing sawed or cut, 2 to 4 feet long, one cent advance on list.....	
Add to one cent one-half cent for each additional cutting under two feet.....	

WIRE IN COILS.

Old English gauge the Standard.

	Common High Brass.	Low Brass.	Gilding, Bronze and Copper.
All Nos. to No. 16, inclusive.....	\$.22	\$.26	\$.30
Nos. 17 and 18.....	.23	.27	.31
" 19 and 20.....	.24	.28	.32
" 21.....	.25	.29	.33
" 22.....	.26	.30	.34
" 23.....	.28	.32	.36
" 24.....	.30	.34	.38
" 25.....	.32	.36	.40
" 26.....	.35	.39	.43
" 27.....	.38	.42	.46
" 28.....	.42	.46	.51
" 29.....	.45	.49	.54
" 30.....	.48	.52	.57
" 31.....	.51	.55	.60
" 32.....	.55	.59	.64
" 33.....	.59	.63	.68
" 34.....	.64	.68	.73
" 35.....	.70	.74	.79
" 36.....	.76	.80	.85
" 37.....	1.00	1.04	1.09
" 38.....	1.30	1.34	1.39
" 39.....	2.00	2.00	2.05
" 40.....	2.50	2.60	2.75

Spring Wire, 2 cts. per lb. advance.
Whitened Wire, 3 cts. per lb. advance.
Flat, Square and Half-round Wire 4 cts. advance on Round Wire.
Fancy Wire not less than 10 cts. advance on Round Wire.
Spooling on one-pound spools 12 cts. per lb. extra.
Spooling on ten-pound spools or more, 2 cts. per lb. extra.

Business Chances.

For the purpose of making the MANUFACTURERS' RECORD a still more valuable medium of communication between its readers North and South, we will publish, FREE OF CHARGE, short advertisements, not exceeding 40 words, from those in the South who have mills, factories, manufacturing sites or water-power for sale, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the Baltimore Manufacturers' Record.

THE SUBSCRIBER offers a splendid location for saw mill, planing mill, or tight barrel factory, large lot with 30 H. P. engine and boiler, two story building, 35 x 75 feet and a large mill house. Situated in a thriving town on E. T. V. & G. R. R., in Georgia, with plenty of pine, and an inexhaustible supply of the finest white oak easy of access. Will sell the property, or invest it with the proper parties to put into the above kindred business. Address J. R. Schofield, 156 Cherry street, Macon, Ga.

MR. G. H. RAWLINS, Rome, Ga., would like to receive catalogues of manufacturers of machinery for hosiery and knit underwear.

A PROVIDENCE HOUSE, having superior facilities for handling pig iron, desires to correspond with one or more Southern furnace proprietors with a view of selling their iron in this market. We have an extensive acquaintance with all the iron buyers in this market and a thorough knowledge of the business. With a good iron suitable for machinery that will be uniform in quality and low in price, large quantities can be sold. Address "B," box 1,196, Providence, R.I.

A BALTIMORE HOUSE, having superior facilities for handling pig iron, desires to correspond with one or more Southern furnace proprietors with a view of selling their iron in this market. We have an extensive acquaintance with all the iron buyers in this market and a thorough knowledge of the business. Address W. J., care MANUFACTURERS' RECORD, Baltimore.

MACHINERY WANTED. Second-hand 4-4 Looms, Draper, Spooler, Quiller, Warper. Say what make and condition, and give with prices attached. H. G. Hall, Fayetteville, N. C.

WATER VALLEY MISS., on the Illinois Central R. R., has unvalued facilities for the following factories: 2d, coffin and furniture factory; 3d, tannery or leather factory; 4th, dairy farm and blooded stock farm; 5th, hub, handles, spoke and felloe works. W. T. Brooks, Water Valley, Miss.

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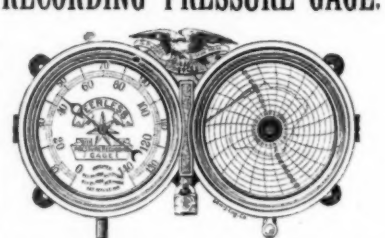
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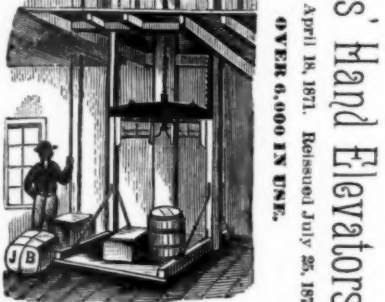
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BY COL. M. B. HILLYARD, NEW ORLEANS, LA.

Published by THE MANUFACTURERS' RECORD, Baltimore, Md.

→PROSPECTUS.←

The publishers of the MANUFACTURERS' RECORD, in furtherance of their aim to lead in matters promotive of the material interests of the South, beg to state that they will shortly issue a work entitled **THE NEW SOUTH**, from the pen of COL. M. B. HILLYARD, of New Orleans, La. The book is devoted to an exposition of the South. It will treat of topography, soil, climate, woods, water-courses, resources, manufactures and such laws as are needful to be known. It will portray the attractions to the capitalist, and those seeking homes in the South, in the lines of manufacture, horticulture and agriculture. It will show what the South is and what she is likely to become by reason of her almost untouched, and slightly known resources in soil, climate, rainfall, marls, minerals and geographical position, and the vast variety of products possible to a wise and varied husbandry, and a grasp of her rich opportunities for manufacture.

The information is new, broad, accurate, unbiased and abundantly avouched by unquestionable authority.

The book is entirely new in its scope and design, and aims to be a guide to all seeking information on most vital matters. No such book has ever been written; and it meets a want now imperative to those seeking information as to the South.

No one wishing to be informed about the South, either in this country or Europe, can dispense with this book.

The author is well-known both North and South for his long identification with Southern development, and perhaps no one else has contributed more to the general stock of information bearing on the South in the columns of Northern journals. His study of the South has been long, large and unremitting, and he contributes the ripe results of these years of study and personal inspection to the preparation of this book. His many qualifications pointed him out to the publishers as the one most fitted for a duty of such delicacy, magnitude and responsibility. They have, however, preferred not to rely upon their own convictions alone as to the author's fitness for the work. Below is furnished abundant testimony from eminent persons North and South, whose reputation, in some instances, is not limited to this continent, and who have witnessed the work of the author for years, in his attempts to invite attention to the South. These are replies to letters sent out by the publishers enquiring as to COL. HILLYARD's fitness for this work.

The book will contain about 400 pages, and will be sold at a price but little in advance of the cost. It will be handsomely gotten up, and will be a model of typography. Its price will be, in paper covers 75 cents; in cloth, \$1.25. At these prices the sale of the book will not, of course, prove largely remunerative; nor was it with that object that it was undertaken. To the author the writing of it has been a "labor of love," and a furtherance of aspirations for Southern development. To the publishers it affords an opportunity to emphasize, and they hope, signalize, their enterprise, and to contribute a noteworthy indication of their resolve to press the claims of the South upon the capital and enterprise of the world.

The work is confidently commended for the novelty and amplitude of its design, for the breadth and accuracy of its information, for the laboriousness of its research, the many years of study and investigation there formulated, and its conscientious and impartial animus.

The following are letters corroborative of the wisdom of committing this work to COL. HILLYARD:—

From MAJOR S. A. JONAS, *Aberdeen, Miss., United States and State Commissioner from Mississippi to the World's Industrial and Cotton Centennial Exposition*:—"In answer to your favor of recent date I take pleasure in saying that I have known COL. M. B. HILLYARD for a number of years, and regard his selection as the editor and compiler of your book upon the South and its resources, as the wisest and best that could have been made. I do not in saying this pretend to gauge his literary capacity, but I know the man's wealth of information upon the subject you propose to confide to him, and where so much has been stored away in good and acceptable shape, it can hardly come forth any the worse for contact with its treasure house, especially in this instance, where the keeper is a man of character and culture, and withal an amiable and enterprising gentleman."

From PARKER EARLE, Esq., *President of the Mississippi Valley Horticultural Society, and Chief of the Horticultural Bureau of the World's Industrial and Cotton*

Centennial Exposition:—"Your engagement of COL. M. B. HILLYARD, of New Orleans, to write your proposed book, descriptive of the South and its varied resources, is a very fortunate one. I think there is no man in the country possessing so many qualifications for doing it accurately, ably and in a pleasing manner. I wish your enterprise great success."

From DANIEL DENNETT, Esq., *Agricultural Editor of the New Orleans Picayune*:—"I have just received your note. I have been acquainted with COL. HILLYARD for more than eight years. I know no man who has studied the interests of these States more intently than he, or with more ardent desire to benefit the South. He has acquired a vast amount of valuable information about the agricultural resources and mineral wealth of these States, and has the ability to put his information in readable shape. I consider him scrupulously honest, and his character above reproach. No man has shown more zeal or industry than he in efforts to promote the best interests of the Southern people. He is popular, and makes friends wherever he goes; and his friends are the best informed people in this country. He has a happy faculty for collecting such facts as you need for the book you intend to publish."

From JAMES H. HEVERIN, Esq., *The Eminent Philadelphia Lawyer*:—"I have known COL. M. B. HILLYARD all his lifetime; and I know no one, who from native talents, natural tastes, thorough education, long residence in the South, general experience, close observation, impartial judgment, and conscientious promptings, is more competent for the work you have confided to him. COL. HILLYARD has resided in a number of the Southern States, and during that time I have known, seen and heard much of him. He has been a close student, a careful observer and at all times an interested and enterprising citizen. He is thoroughly familiar with the States of the South, their governments, their people, customs, habits, products, industries, resources and histories, and is therefore fully and admirably equipped in every way for the charge with which you have entrusted him. It gives me great pleasure to commend him to those who may be interested in your contemplated publication."

From THOMAS MEEHAN, Esq., *The Celebrated Author, now Editor of The Gardeners' Monthly, Philadelphia*:—"I am very glad to know that you contemplate issuing a work on the industrial resources of the South."

I deem it fortunate that you have been able to secure the assistance of COL. HILLYARD in connection with it. I know of no man more able, while he has the advantage of thorough conscientiousness. I always found in my experience that if COL. HILLYARD said a certain thing was so, I might safely repeat it without danger of contradiction."

From COL. LEE CRANDALL, *Editor of The National Vice, Washington, D. C.*:—"I am very glad to know that you will soon publish a book on the Southern States."

You have made an admirable selection in COL. M. B. HILLYARD to write such a work. He is thoroughly acquainted with every section of the South, and will collect information invaluable to those desiring knowledge of any Southern State."

From J. G. KINGSBURY, Esq., *Editor of The Indiana Farmer, Indianapolis*:—"COL. M. B. HILLYARD has contributed to our columns, and he is a clear and interesting writer, careful and painstaking in collecting and reporting information regarding the condition and resources of the Southern States. He is eminently qualified for the work in which he is now engaged."

From GENERAL A. M. WEST, *Formerly President Mississippi Central R. R. Co., 2d Vice-President New Orleans, St. Louis and Chicago R. R. Co., President Mississippi Valley R. R. Co., etc.*:—"Your letter received, and contents noted. * * * I congratulate you on the selection of MR. HILLYARD. No one more competent than himself could have been chosen."

From A. C. DANNER, Esq., *President Danner Land and Lumber Co., Mobile, Ala., President Bank of Mobile, Vice-President North and South R. R. Co., of Alabama*:—"I believe that COL. HILLYARD would be a suitable man for the work you describe. He is an industrious man, an honest man, and an educated man. Take him all in all, I know of no one more suitable for the work in question than he is."

From GENERAL S. D. LEE, *President Agricultural and Mechanical College of Mississippi*:—"I consider COL. M. B. HILLYARD, of New Orleans, as a most competent gentleman to prepare a book embodying a description of the Southern States."

From GENERAL E. C. WALTHALL, *Granada, Miss., One of the Best Known Lawyers in the South*:—"When MR. M. B. HILLYARD lived in Mississippi, he gave much attention to the consideration of the resources of the State, and wrote much for journals in the North as to its timber, soil, climate, &c. He is a fine writer and well-fitted for the work you propose."

From S. H. EDGAR, Esq., *Manager New York Office, Louisville and Nashville Railroad, 52 Wall Street, New York*:—"In reply to your letter at hand a day or two since relative to the book you design publishing, descriptive of the Southern States, I beg to say that I consider COL. M. B. HILLYARD excellently well qualified for preparing the book in question. I have known him well for several years. He is a skilled writer; conversant especially with the physical characteristics of the Southern States; laborious and conscientious; and zealous in the work of making known the advantages the South possesses in climate, soil and general productiveness. You are happy in the selection of COL. HILLYARD to write your book."

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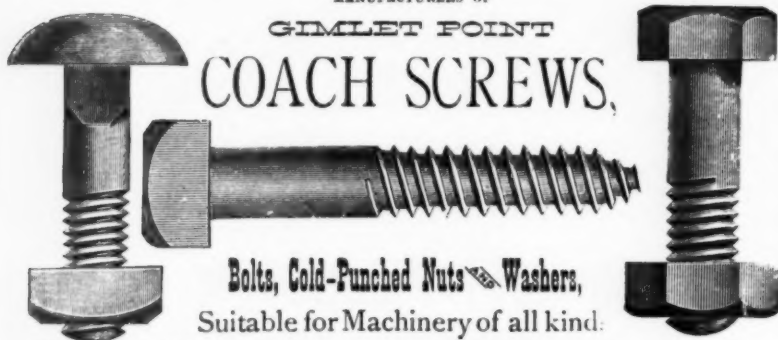
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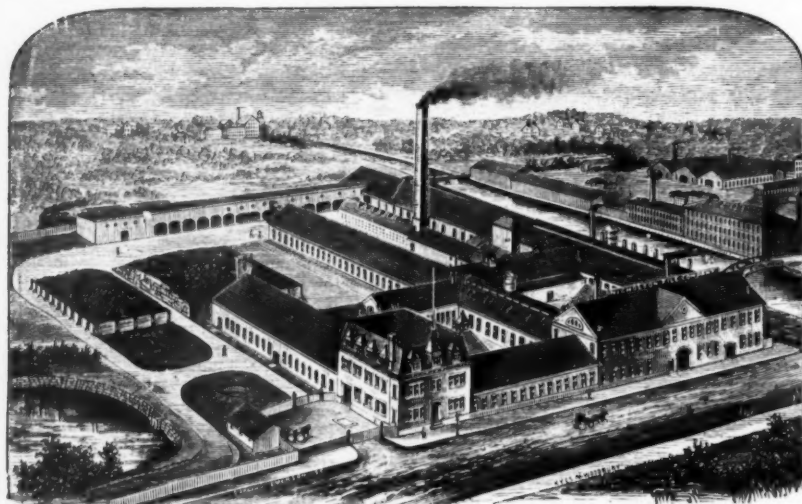
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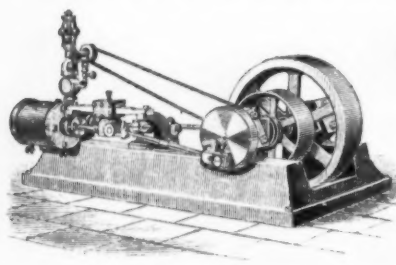
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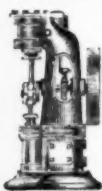
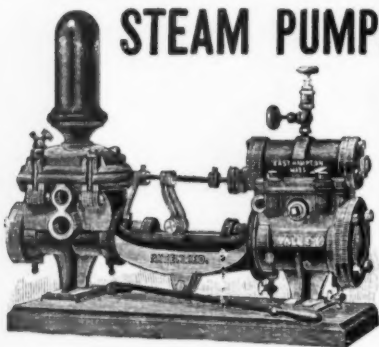
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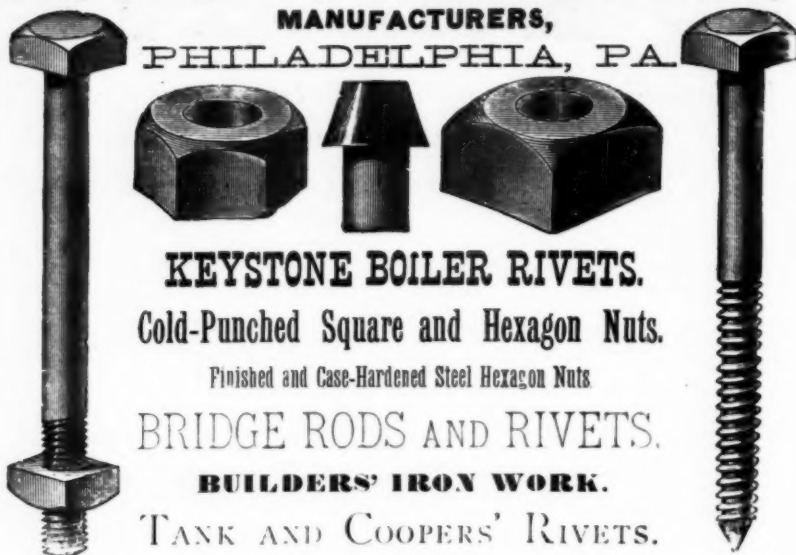
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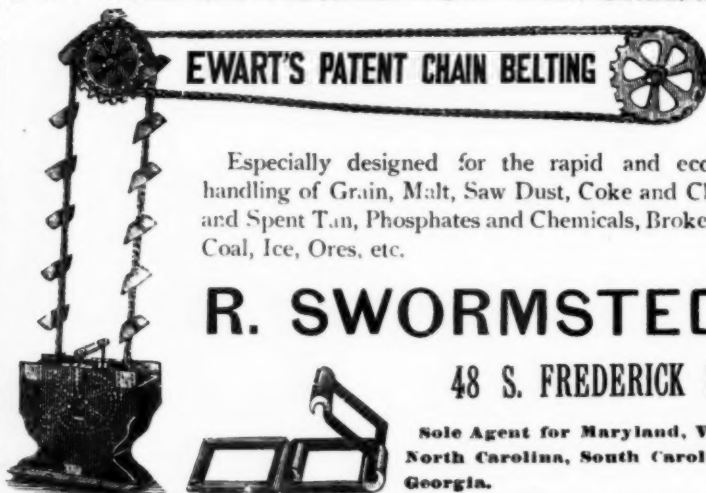
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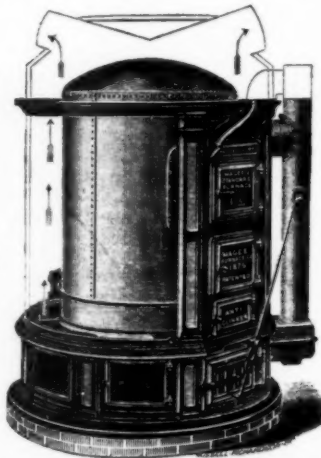
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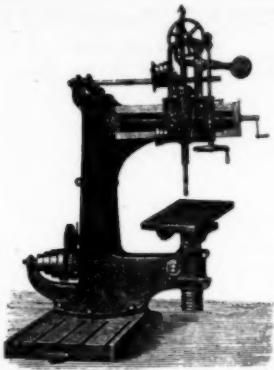
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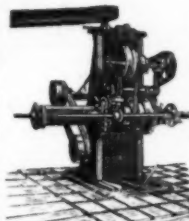
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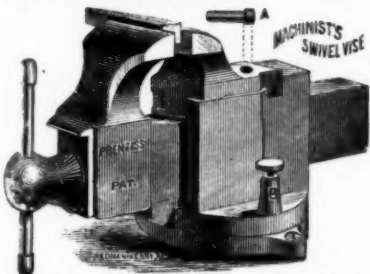
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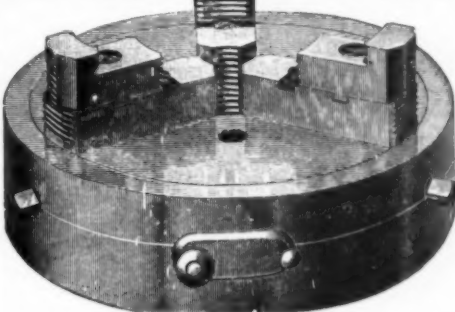
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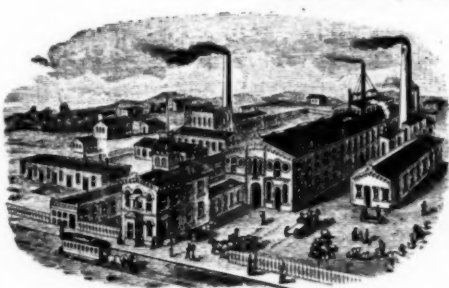
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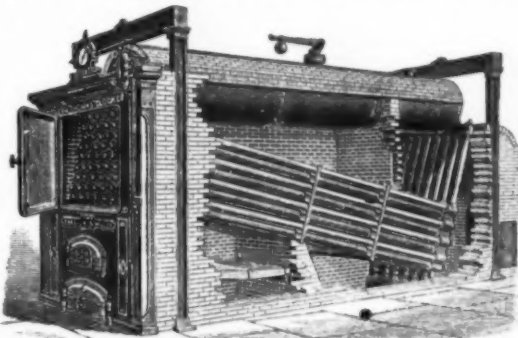
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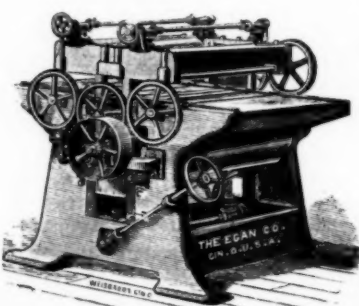
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Carriage and Buggy Shops and

GENERAL WOOD WORKERS,

MANUFACTURED BY

THE EGAN CO.

228 to 240 W. Front St., Cincinnati, O., U. S. A.

Thos. P. Egan, Pres. Ed. Ruthven, Sec. F. Danner, Sup.

SAML. G. B. COOK & CO., HARDWARE

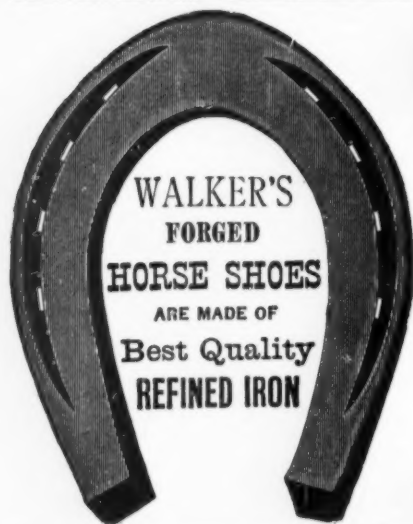
MANUFACTURERS' AGENTS

63, 65, 67 and 69 German St., BALTIMORE, MD.

T. V. Allis Mfg. Co.—Buckthorn Wire.
American Screw Co.—Screws, Rivets, Bolts, etc.
Branford Lock Works.
Boss Molasses Gates.
Carr & Crawley.—Shelf and Carriage Hardware.
Lancaster Bolt Co.—Eagle Carriage Bolts.
Lawson & Brenizer.—Hay and Manure Forks.
Meriden Britannia Co.—Rogers Bros.' Art Plated Goods.
Northwestern Horse Nail Co.
Nicholson File Co.
Naugatuck Cutlery Co.
Globe Horse Nail Co.

AGENTS FOR
Clark Hardware Co.—Spring Butts, Screen Frames, etc.
Cowles Hardware Co.—Gears, Butts, Screw Drivers, etc.
H. Chapin's Sons.—Rules, Levels, Gauges, etc.
Clark Bros. & Co.—Bolts.
Essex Horse Nails.
A. Field & Sons.—Tacks, Finishing Nails, etc.
Hubbard, Bakewell & Co.—Lippincott Axes, Saws, Shovels and Hoes.
Holroyd & Co.—Stocks and Dies.
Henry W. Kipp.—Hammers.
Klein, Logan & Co.—Picks, Mattocks, Sledges, etc.
Kimball's Patent Shovels and Spades.
Lockwood Steel Hoes.

Peck Bros. & Co.—Brass Cocks.
Payson Mfg. Co.—Building Hardware.
Patton Mfg. Co.—Enameled and Tin'd Hollow Ware.
Roy & Co.—Strap and T Hinges and Wrought Butts.
Saranac Horse Nail Co.
Scott Mfg. Co.—Peach and Apple Pearers, etc.
George M. Scott.—Blacksmith Bellows.
Wilson's Mfg. Co.—Coffee Mills, Vises and Ship Hardware.
Walker's Horse and Mule Shoes.
International and Pimlico Brand of Horse Nails, Foreign and Domestic Hardware, Cutlery, Chains, Pistols, etc.



Walker Horse Shoe Co., Baltimore, Md.

OF SUPERIOR SHAPE and FINISH.

Clean Crease of Proper Width and Depth.

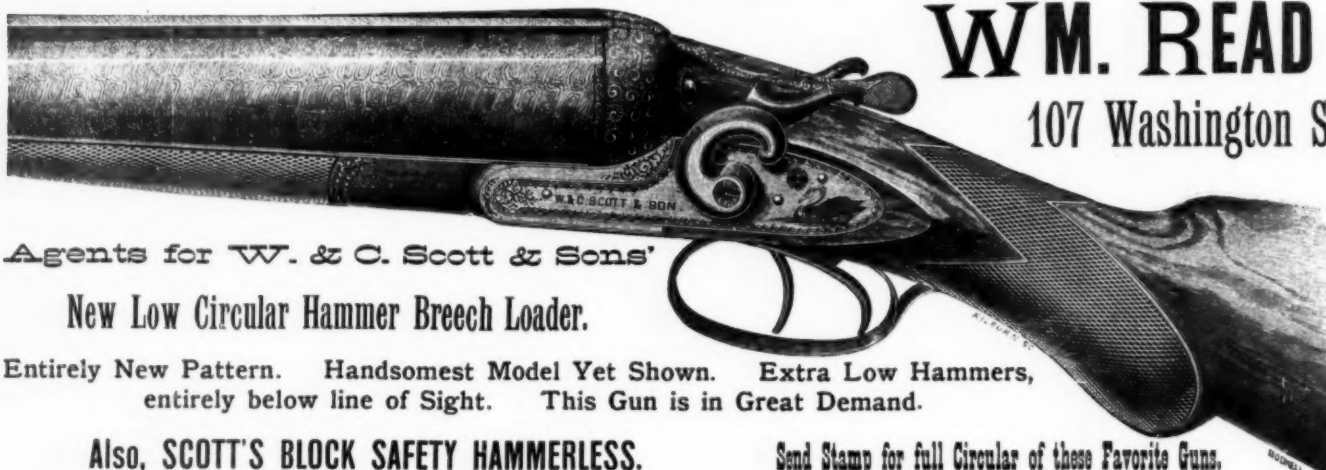
Nail Holes Punched Through at Proper Angles.

Free from Burs. Outside Edges Smooth and Free from Bulges. Popular with all Shoers, as they are easily fitted. **EVERY SHOE WARRANTED.** ALSO,

MULE SHOES,

Of Superior Pattern, Quality and Shape.

Sole Patentees and Manufacturers.



WM. READ & SONS

107 Washington St., Boston,

Agents for W. & C. Scott & Sons'

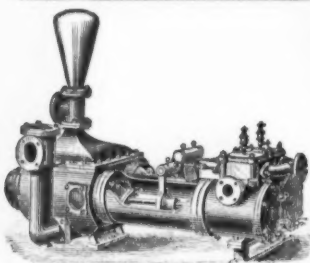
New Low Circular Hammer Breech Loader.

Entirely New Pattern. Handsomest Model Yet Shown. Extra Low Hammers, entirely below line of Sight. This Gun is in Great Demand.

Also, SCOTT'S BLOCK SAFETY HAMMERLESS.

Send Stamp for full Circular of these Favorite Guns.

Sole American Agents for the Celebrated ROYAL MAIL Light Bicycles; Weight 36 lbs.; Used by Prince, Morgan, Dolph, Brooks, Chambers, Etc. The coming Favorite Wheel! Good Agents Wanted. Send Stamp for Illustrated Circulars.



The Worthington Duplex Steam Pumps,

Independent Condensers and Pumping Machinery of all kinds.

BOILER FEED, MINING, FIRE AND BREWERY PUMPS.

JACKSON & TYLER, Sole Agents, 16 and 18 S. Howard St., Baltimore, Machinery, Tools and Supplies.

SEND FOR PRICE-LISTS AND ESTIMATES.

A. G. ALFORD & CO.

WHOLESALE DEALERS IN

GUNS, PISTOLS, Ammunition, &c.

SOUTHERN AGENTS FOR

COLT GUNS, REPEATING RIFLES, &c.

Remington Guns, Rifles, &c.

Delaware Cartridge Co.'s Paper Shells, &c.

116 West Baltimore Street, near North, Baltimore, Md.



ESTABLISHED 1845.

The Oldest Saw Manufactory in the South.

TOLAND & SON, 85 N. Front St., Baltimore.

Particular attention paid to Large Circular Work. We warrant our Small Circular Saws to stand more strain, without buckling or cracking, than any other make. We make all kinds of Saws, Ensilage, Feed, Meat Choppers, and other knives made to pattern, warranted equal to the Best Forged Knives, and CHEAPER.

N. B. We make no charge for hammering any Large Circular Saw that we can't make "go." —GIVE US A TRIAL.—

—JOHN MERRY,—

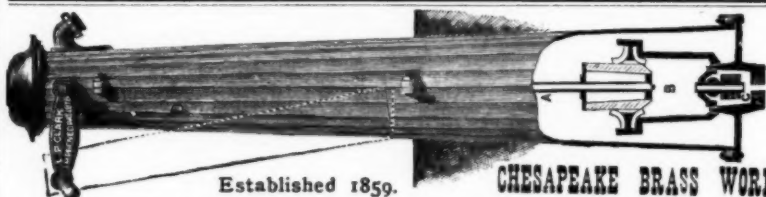
WEST SIDE GALVANIZING WORKS,

535 to 547 West 15th Street, New York.

—MANUFACTURER OF—

The "LION" and "PHOENIX" Brands of Galvanized Sheet Iron.

Corrugated Iron for Roofing or Siding, Tin Plates, Solder, Slating and Roofing Nails, Tinned Galvanized and Black. All kinds of Iron work Galvanized or Tinned to order.



Established 1859.

CHESAPEAKE BRASS WORKS.

L. P. CLARK & SONS, 34 N. Holliday St., BALTIMORE.

JOSEPH B. MATTHEWS, 41 Centre Market Space, BALTIMORE, MD.

—MANUFACTURER OF THE—

MATTHEWS AUTOMATIC HIGH-SPEED ENGINE.

For Electric Lights and other purposes requiring steady, reliable power. The best and cheapest in the market. 25 H. P. for \$500. SEND FOR CIRCULAR.

→ HARDWARE ←

Baltimore WHOLESALE Prices.

ANVILS.	
Eagle and Vulcan.	per lb. 10 c. dis 20%
Wright's.	10 1/2 c.
Armstrong's Mouse Hole.	9 1/2 c.
Trenton.	10 1/2 c.
Wilkinson's.	10 1/2 c.
AUGERS AND BITS.	
Conn. Valley Mfg. Co.	dis 60%
Douglas Mfg. Co.	from list of Ives.
Cook's Douglass Mfg. Co.	Jan. 7, 1880
Grissold.	dis 50%
Patent Solid Head.	dis 25%
Russell Jennings' Auger, Dowell, Machine.	dis 10%
Dowell and Hand Rail Bits.	dis 10%
Ives' "Jennings" Bits.	dis 10%
Expansive Bits, Clark's small, 1/8; large, 1/4.	dis 25%
Expansive Bits, Ives'.	dis 25%
Expansive Bits, Blake's.	dis 25%
Hollow Augers, Ives'.	dis 25%
Hollow Augers, Douglass'.	dis 25%
Hol. Aug., Bonney's Adjust., 1/2 doz \$4.80.	dis 25%
Hol. Aug., Stearns' Adjust., 1/2 doz \$4.80.	dis 25%
Hol. Aug., Ives' Expansive, each \$4.50.	dis 25%
Hol. Aug., Universal Expansive, each \$4.50.	dis 25%
Wood's.	dis 25%
Gimlet Bits.	dis 25%
Gimlet Bits, Diamond.	dis 40%
Double Cut Gimlet Bits, Shephardson's.	dis 40%
Double Cut Gimlet Bits, Douglass'.	dis 33 1/3%
Double Cut Gimlet Bits, Ives'.	dis 50%
Morse's Bit Stock Drill.	dis 25%
L. Hommedieu's Ship Augers.	dis 15%
AWL HAFTS.	
Sewing Brass Ferrule.	dis 40%
Patent Sewing, Short.	dis 40%
Patent Sewing, Long.	dis 40%
Patent Peg, Plain Top.	dis 40%
Patent Peg, Leather Top.	dis 40%
AWLS, BRAD SETS, &c.	
Awls, Sewing, Common.	dis 75%
Awls, Shouldered Peg.	dis 75%
Awls, Patent Peg.	dis 75%
Awls, Shouldered Brad.	dis 75%
Awls, Handled Brad.	dis 75%
Brad Sets, Aiken's.	dis 75%
Brad Sets, No. 4, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.	dis 75%
Brad Sets, Stanley's Exc. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	dis 75%
Brad Sets, Stanley's Exc. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	dis 75%
Brad Sets, Stanley's Exc. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	dis 75%
Collins & Co.	dis 75%
Cohoes Mfg. Co.	dis 75%
Lippincott or Mann's.	dis 75%
Single Bit, 1/2 to 5/8 and under.	dis 75%
Single Bit, 1/2 to 5/8 and over.	dis 75%
Single Bit, beveled.	dis 75%
Double Bit, 1/2 to 5/8 and under.	dis 75%
Double Bit, 1/2 to 5/8 and over.	dis 75%
Double Bit, beveled.	dis 75%
Second quality Axes.	dis 75%
AXLES.	
Sheldon & Co., iron.	dis 55% off
Steel.	dis 55% off
AXLE GREASE—Frazier's.	dis 60% off
BALANCES.	
Spring Balances.	dis 25% and 10%
BELLS.	
Hand, Light Brass.	dis 70%
Hand, White Metal.	dis 60%
Hand, Silver Chime.	dis 20%
Hand, Globe (Cone) Patent.	dis 25%
Gong, Abbe's.	dis 20%
Gong, Vankee.	dis 20%
Gong, Barton's.	dis 20%
Leon Reading.	dis 20%
Pull, Brook's.	dis 20%
Crank, Taylor's.	dis 20%
Lever, Sargent's.	dis 20%
Bloomfield.	dis 20%
Lever, K. & E. M. Co's.	dis 20%
Call.	dis 20%
Cow, Common Wrought.	dis 20%
Cow, Western, Sargent's List.	dis 20%
Cow, Kentucky, Sargent's List.	dis 20%
Cow, Moore's or Dodge's, Genuine Ky., new list.	dis 20%
Nos. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.	dis 20%
Blacksmith's Common.	dis 50%
Molder's.	dis 25%
Hand Bellows.	dis 25%
BLIND FASTENERS.	
Francis.	dis 20%
Mackrell's.	dis 20%
Van Sand's Screw Pattern.	dis 20%
Van Sand's Old Pattern.	dis 20%
Merriman's.	dis 20%
Zimmerman's, 10 in.	dis 20%
Zimmerman's, 9 in.	dis 20%
Zimmerman's, without screws.	dis 20%
BLIND STAPLES.	
Barbed, 1/2 in. and larger.	dis 10% net
Barbed, 3/4 in.	dis 10% net
BLOCKS.	
Penfield Block Co., Rope and Iron Strap'd.	dis 40%
BOLTS.	
Cast Iron Barrel Shutter, &c.	dis 55%
Cast Iron Chain Sargent's list.	dis 60%
Wrought Barrel.	dis 55%
Wrought Square.	dis 55%
Wrt. Shutter, all Iron, Stanley's list.	dis 50%
Wrt. Shutter, Brass Knob, Stanley's list.	dis 50%
Wrt. Shutter, Sargent's list.	dis 50%
Wrought Sunk Flush, Sargent's.	dis 50%
Wrought Sunk Flush, Stanley's.	dis 50%
Wrought B. K. Flush, Stanley's.	dis 50%
Carriage and Tire, Common, new list.	dis 75%
Carriage Bolt, Philadelphia Pattern.	dis 75%
Carriage Bolts, Clarke's.	dis 80%
Carriage Bolts, Lancaster Bolt Co.	dis 80%
Excelsior, Low List.	dis 60%
Norway.	dis 75%
R. B. & W. Carriage (old list).	dis 65%
Tire, American Screw Co's., Phila.	dis 80%
Tire, "Bay State."	dis 70%
Eagle Philadelphia Tire Bolt.	dis 80%
Stove.	dis 60%
Plow.	dis 60%
Machine.	dis 70%
Bolt Ends and Lag Screws.	dis 70%
BORAX.	
15c per lb. net.	
BRACES.	
U. S. Backus.	dis 50%
Barber's.	dis 40%
Spofford's Patent.	dis 50%
Ive's Patent Braces.	dis 50%
Common Ball (American).	dis 55%
Amidon's.	dis 50%
BORING MACHINES—WITHOUT AUGERS.	
Sweet & Clark upright, 3.60 angular.	dis 40% net
Lawrence.	dis 30% net
Hubbard.	dis 30% net
Phillips, with Augers.	dis 70% net

BRACKETS.	
Shelf, plain.....	dis 50k 10 %
Shelf, fancy.....	dis 55k 10 %
BRIGHT WIRE GOODS.	
New list.....	dis 70k 10 %
BULL RINGS.	
Union Nut Co.....	dis 55 %
Sargent's.....	dis 60k 10 %
Humason, Beckley & Co's.....	dis 60k 10 %
BUTTS.	
Wrought Brass.....	dis 75 %
Cast Brass, Fast Joint.....	dis 10k 10 %
Cast Brass, Loose Joint.....	dis 10k 10 %
Fast Joint, Narrow.....	dis 45k 10k 10 %
Fast Joint, Broad.....	dis 45k 10k 10 %
Loose Joint.....	dis 60k 10k 10 %
Loose Joint, Japanned.....	dis 60k 10k 10 %
Loose Joint, Jap, with Acorns.....	dis 60k 10k 10 %
Parliament Butts.....	dis 60k 10k 10 %
Mayer's Hinges.....	dis 60k 10k 10 %
Loose Pin, no Acorn.....	dis 60k 10k 10 %
Loose Pin, Acorns.....	dis 60k 10k 10 %
Loose Pin, Acorns, Japanned.....	dis 60k 10k 10 %
Loose Pin, Acorns, Jap'd, Plated.....	dis 60k 10k 10 %
Tips.....	dis 60k 10k 10 %
Wrought Iron.	
Fast Joint, Narrow.....	dis 60k 10 %
Fast Joint, Lt. Narrow.....	dis 60k 10 %
Fast Joint, Broad.....	dis 60k 10 %
Loose Joint, Broad.....	dis 60k 10 %
Table Butts, Back Flaps, &c.....	dis 60k 10 %
Inside Blind, Regular.....	dis 60k 10 %
Inside Blind, Light.....	dis 60k 10 %
Loose Pin, Wrt.....	dis 60k 10 %
Loose Pin, Light.....	dis 60k 10 %
Spring Hinges—	
Geer's Spring and Blank Butts.....	dis 25 %
Clarke Hardware Co's.....	dis 50k 10 %
American Spring Hinge Co's.....	dis 25 %
Gem Spring Hinges.....	dis 25 %
Blind Butts, Shepard's, Nos. 50 and 60.....	dis 70 %
Blind Butts, Shepard's, No. 50.....	dis 70k 5 %
Blind Butts, Shepard's, No. 75.....	dis 70k 10 %
Blind Butts, Lull & Porter.....	dis 75 %
Blind Butts, Huffer.....	dis 50 %
Blind Butts, Clark's, Nos. 1, 3, 5.....	dis 70k 10 %
Standard Lull & Porter.....	dis 75 %
BOW PINS.	
Humason, Beckley & Co's.....	dis 55k 5 %
Sargent & Co's.....	\$19.70 and 21.40; dis 55k 5 %
Hotchkiss.....	dis 25 %
BUTCHER'S CLEARERS.	
Humason & Beckley Mfg. Co.....	dis 25 %
Bradley's.....	dis 25 %
Beatty's.....	dis 25k 5 %
CAN OPENERS.	
American.....	\$16.50 19.00 21.50 24.00 27.00 30.00 33.50 36.50
New Idea.....	per gross \$7.50, dis 10 %
No. 4, French.....	per doz \$2.25, dis 55 %
No. 5, Iron Handle.....	per gross \$7.50, dis 10 %
Sardine Scissors.....	per doz \$7.00, dis 55 %
Sprague, No. 1, \$2; No. 2, 2.25; No. 3, 2.50; dis 50k 10 %	
Universal.....	per doz \$3.00, dis 33 1/3 %
CAPS, PERCUSSION.	
U. M. C., F. C. trimmed.....	1,000 dis 10k 10 %
U. M. C., F. L. ground.....	700 dis 10k 10 %
U. M. C., Cen. fire ground.....	700 dis 10k 5 %
U. M. C., Double W. Proof.....	\$1.40 dis 10 %
E. D. & S. B.....	33c dis 10 %
E. B. 1-to, Eley's.....	60c
Musket, in 1-to 5 in brass.....	55c
Hicks Ground Edge.....	55c
CARTRIDGES.	
Rim—	dis 50k 10 %
Central Fire, pistol size.....	dis 33 1/3 %
“ Military.....	dis 25 %
B. B. Caps, Round Balls.....	1.75
“ Swaged Conical.....	1.90
NEW LIST ON CARTRIDGES.	
Rim-fire, 22 short.....	\$ 5 long.....\$ 6.00
“ 32 “.....	10 “.....15.50
“ 38 “.....	18 “.....16.00
“ 41 “.....	15 “.....17.50
Central Fire 32, \$11.00; 38, \$13.50; 41, 15.00; 44, 17.00.	
CARBIS.	
Horse and Curry, new list, July, 1881.....	dis 10 %
Cotton, new list, July, 1881.....	dis 10 %
Wool, new list, July, 1881.....	dis 10 %
CARPET STRETCHERS.	
Cast Steel, Polished.....	per doz \$5.00, dis 30 %
Cast Iron, Steel Points.....	per doz \$2.00, dis 50 %
Bullard's.....	dis 25 %
CASTERS.	
Bed.....	dis 47 1/2k 10 %
Plate and Shallow Socket.....	dis 47 1/2k 10 %
Deep Socket.....	dis 47 1/2k 10 %
Martin's Patent (Phoenix).....	dis 25 %
CATTLE LEADERS.	
Humason, Beckley & Co's.....	dis 60k 10 %
Sargent's.....	dis 60k 10 %
P. S. & W.....	dis 25k 10 %
CHAIN.	
German Halter and coil Chain.....	dis 50k 10 %
Trace, Breast and Fancy.....	dis 45k 5 %
Onesida Halter Chain (old list).....	dis 45k 5 %
Galvanized Pump Chain.....	per lb 8c net
Jack Chain, Iron.....	dis 10k 10 %
Jack Chain, Brass.....	dis 50k 10 %
CHALK.	
White.....	per gross 60c net
Red.....	per gross 85c net
Blue.....	per gross \$1.00 net
White Crayons.....	per gross 9c net
COTTON LINES.	
Cotton Fish Lines.....	dis 33 1/3 %
Cotton Chalk Lines, 20 feet:	
Nos. 11, 13, 15, 17, 20,.....	dis 33 1/3 %
3.20, 3.60, 4.00, 4.50, 5.25.....	dis 33 1/3 %
CHISELS.	
Socket Framing, Crossman.....	dis 65k 5 %
Socket Framing, P. S. & W.....	dis 70k 10 %
Socket Framing, Douglass.....	dis 70k 10 %
Socket Firmers, Crossman.....	dis 65k 5 %
Socket Firmers, Ohio Tool Co.....	dis 60k 10 %
Socket Firmers, Douglass.....	dis 70k 10 %
Socket Firmers, Douglass.....	dis 70k 10 %
Tanged Firmers.....	dis 10k 45 %
Tanged Firmers, Butcher's.....	\$5.00, \$5.25, to 2
Merrill's Socket and Framing Chisel.....	dis 65k 10 %
CLAMPS.	
Iron, Screw, Eagle.....	dis 50 %
Iron, Adjustable, Stearns.....	dis 20k 10 %
Iron, Cabinet, Sargent's.....	dis 65k 10 %
Iron, Carriage maker's, Carr & Crawley.....	dis 25 %
CLIPS, AXLE.	
Norway or Best.....	dis 60k 5 %
Superior.....	dis 45k 5 %
Conestogo.....	dis 60k 10 %
Coal Hods—Griffiths.....	dis 40 %
COCKS, BRASS.	
Racking, new list, July 10, 1880.....	dis 50k 10 %
Globe, new list, July 10, 1880.....	dis 50k 10 %
Plain Bibbs, new list, July 10, 1880.....	dis 50k 10 %
Alain and Beer, new list, July 10, 1880.....	dis 50k 10 %
COFFEE MILLS.	
Walker's.....	dis 45 %
Wilson's.....	dis 50 %
Logan & Strobidge.....	dis 45 %
Enterprise Mfg. Co.....	dis 25 %
COMPASSES, DIVIDERS, AC.	
Compasses.....	dis 55 %
Calipers.....	dis 55 %

LAWN MOWERS.		Enterprise Mfg. Co.		SILVER PLATED HOLLOW WARE.		WIRE.	
Huckeye, Easy and Excelsior, new list.		dis 30 %		Wm. Rogers Manf. Co.		dis 40, 15 & 5 %	
LINES.				Meriden Britannia Co.		dis 33 1/2 %	
Linen Fish.		dis 25 & 10 %		SPOONS.			
Wire Clothes, Galvanized, 100 feet.		dis 33.00		Britannia.		dis 60 & 10 %	
LOCKS AND LATCHES.				Tinned, Iron, Table and Tea.		dis 65 %	
Cabinet, Eagle.		Changes made in list price		Tinned Iron Basting.		dis 65 %	
Cabinet, Gaylord.		of some numbers Jan. 1,		German Silver.		dis 40 %	
Cabinet, Bridgeport.		1881, dis 25 & 2 %		STONE.			
Cabinet, P. & F. Corbin.		dis 40 %		Hindustan No. 1, 5c.; Axe, 8c.		net	
Trunk, new list, Jan. 1, 1881.		dis 15 & 2 %		Sand Stone.		dis 33 1/2 & 10 %	
Yale Lock Co., Flat Key.		dis 40 %		Washita Stone.		No. 1, 1 lb., 16c. net	
Plate.		dis 33 1/2 & 2 %		Washita Stone, Slips.		No. 1, 1 lb., 45c. net	
DOOR LOCKS, ETC.				Arkansas.		dis 10 %	
Bradford.				SQUARES.			
Norwalk.				Steel.		dis 50 %; full cases, dis 50 & 10 %	
Norwich.				Iron.		dis 50 %; full cases, dis 50 & 10 %	
P. & F. Corbin.				Nickel Plated.		add dis 2.50 per doz. net.	
Russell & Erwin.				Try Square and T Bevels.		dis 50 & 10 %	
Mallory, Wheeler & Co.		dis 45 %		Disston's Try Square and T Bevels.		dis 40 %	
Padlocks—Russell & Erwin.		dis 45 %		TACKS, BRADS, AC.			
Mallory, Wheeler & Co.		dis 45 %		New List, Sept. 1, 1882.			
Norwich Lock Manf. Co.		and 25 for cash.		Tinned Swedes Tacks.		dis 30 %	
Wm. Wilcox & Co.				Tinned American Tacks.		dis 30 %	
Wm. Wilcox & Co.'s Plate Locks.		dis 33 1/2 %		Swedes Tacks, all kinds.		dis 30 %	
Yale Lock Manf. Co.'s "Standard".		dis 40 %		American Cut Tacks.		dis 30 %	
Romer's.		dis 25 & 40 %		Copper Tacks and Nails.		dis 30 %	
Conestoga.		dis 75 %		Hungarian Nails.		dis 35 %	
Scandinavian, "Norwich".		dis 50 & 10 %		Gimp and Lace Tacks.		dis 30 %	
MALLET.				Gimp and Lace Tacks, Tinned.		dis 30 %	
Penfield Block Co., Apple, Hickory and				Finishing Nails.		dis 25 %	
Lignumvite.		dis 30 %		Trunk and Clout Nails.		dis 25 %	
MEAT CUTTERS.				Common and Patent Brads.		dis 20 %	
Dixon's (P. S. & W.) Nos. 1 2 3 4.		dis 35 %		Basket Nails.		dis 20 %	
Perry's, Nos. 1 2 3 4 5 6 7 8 9 10.		dis 35 %		Brush Tacks.		dis 20 %	
Each.		dis 35 %		Leathered Carpet Tacks.		dis 20 %	
Woodruff's (P. S. & W.) Nos. 100 150.		dis 35 %		Cigar Box Nails.		dis 20 %	
Hales' Nos. 1 2 3 4 5 6 7 8 9 10.		dis 35 %		Chair Nails.		dis 20 %	
Kieser's No. 55.		dis 40 %		Double-pointed Tacks.		dis 40 & 5 %	
Kieser's Gem.		dis 40 %		TAP BORERS.			
Kieser's No. 82.		dis 40 %		Common and Ring.		dis 20 %	
Kieser's Monarch.		dis 40 %		Ives' Tap Borers.		dis 15 & 10 %	
Beef Shaver, (Enterprise Manf. Co.)		dis 25 %		Enterprise Mfg. Co.		dis 25 %	
MOLASSES GATES.				TOBACCO CUTTERS.			
Stebbins Patterns.		dis 70 & 10 %		Enterprise Mfg. Co. (Champion).		dis 25 %	
Stebbins Genuine.		dis 67 & 10 %		Wood Bottom.		dis 12.00, dis 40 & 5 %	
Stebbins Tinned Ends.		dis 40 & 10 %		All Iron.		dis 50 %	
Chase's Hard Metal.		dis 50 & 10 %		Wilson's.		dis 35 %	
Self-Measuring, (Enterprise).		dis 20 %		THERMOMETERS.			
Lincoln's Pattern.		dis 60 & 10 %		Tin Case.		dis 75 & 10 %	
Weed's.		dis 15 %		Storm Glasses.		dis 3.25 per doz.	
Boss Nos. 1 2 3 4.		dis 15 %		TOE CALKS.			
Boss, Japanned Finish.		dis 60 & 10 %		Winsted.		dis 10 c. dis 5 %	
Boss, Bronze Finish.		dis 50 & 10 %		TRAPS.			
NUTS AND WASHERS.				Game, Newhouse.		dis 35 %	
Square Nuts.		dis 8 c off list.		Game, Oneida Pattern.		dis 60 & 10 %	
Hexagon Nuts.		dis 8 1/2 c off list.		Game, Blake's Patent.		dis 40 & 10 %	
Washers.		dis 7 1/2 c off list.		Mouse, Wood, Choker.		dis 10 %	
OILERS.				Mouse, Round Wire.		dis 10 %	
Zinc and Tin.		dis 60 & 10 %		Mouse, Cage, Wire.		dis 10 %	
Brass and Copper.		dis 50 %		Mouse, Catch-em-alive.		dis 10 %	
Malleable (Hammer's).		dis 50 %		Cyclon Mouse.		dis 75 cts.	
PINKING IRONS.				Ideal Mouse.		dis 10 %	
Per dozen.		dis 75 cts. net		Rat, "Decoy".		dis 10 %	
ASTOR PLATING MACHINES.				Delusion Mouse, per doz.		dis 1.50	
Astor Plating Machine.		dis 15 %		TROWELS.			
Crown Plating Machine.		dis 25 %		Lothrop's Brick and Plastering.		dis 25 %	
PLANES AND PLANE IRONS.				Reed's Brick and Plastering.		dis 15 %	
Bench, First Quality.		dis 20 %		Disston's Brick and Plastering.		dis 20 %	
Bench, Second Quality.		dis 25 %		Clement & Maynard's.		dis 20 %	
Molding.		dis 15 %		Worrall's Brick.		dis 20 %	
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879.		dis 20 & 10 %		Brades & Walby's.		dis 20 %	
The Stanley (S. R. & L. Co.) new list, January 1879.		dis 20 & 10 %		Garden.		dis 55 %	
Bailey's.		dis 20 & 10 %		TRUCKS (WAREHOUSE, AC.)			
Plane Irons, Butcher's.		dis 20 %		Handy Truck.		dis 2.50 net	
Plane Irons, Auburn Tool Co.		dis 20 %		Penfield Block Co. list, 1882.		dis 35 %	
Plane Irons, Ohio Tool Co.		dis 20 %		Peerless, with Cogs, No. 3.		dis 54.00	
Plane Irons, Sandusky Tool Co.		dis 20 %		Peerless, with Cogs, No. 4.		dis 66.00	
PLIERS AND NIPPERS.				Eureka, No. 2.		dis 42.00	
Butter's Patent.		dis 33 1/2 %		VISES.			
Hall's Pat. Compound Lever Cutting Nippers.		dis 25 %		Solid Box—Wilson's.		dis 50 %	
No. 2, 5 in. \$13.50; No. 4, 7 in. \$21.		dis 25 %		Trenton.		dis 45 %	
Gas Pliers.		dis 50 %		Iron City Tool Works.		dis 50 %	
PLUMBS AND LEVELS.				Bench—Wilson's.		dis 45 %	
Disston's.		dis 40 %		Trenton.		dis 45 %	
Stanley R. & L. Co.'s Pat. Adjustable.		dis 65 & 10 %		Parker's.		dis 20 %	
Stanley R. & L. Co.'s Non-Adjustable.		dis 65 & 10 %		Prentiss.		dis 25 %	
Chapin's Patent Adjustable.		dis 65 & 10 %		Bonney's.		dis 35 %	
Chapin's Non-adjustable.		dis 65 & 10 %		Well Wheels.		dis 60 & 10 & 10 %	
Standard Rule Co.'s New Adjustable.		dis 65 & 10 %		WIRE.			
Standard Rule Co.'s Non-Adjustable.		dis 65 & 10 %		Brass and Copper, list of Jan. 17, 1884.		dis 15 %	
Pocket Levels.		dis 65 & 10 %		Bright and Annealed.		dis 10 %	
RAIL.				Bright and Annealed.		dis 10 %	
Sliding Door, Wrought Brass.		dis 40 %		Bright and Annealed.		dis 10 %	
Sliding Door, Bronze Wrt. Iron.		dis 35 %		Coppered.		dis 10 %	
Sliding Door, Iron, Painted.		dis 10 & 10 %		Galvanized, Nos. 0 to 18.		dis 40 %	
Barn Door.		dis 10 %		Tinned, Nos. 0 to 18.		dis 60 %	
Per 100 feet.		dis 10 %		Tinned Broom Wire, Nos. 18 to 25.		dis 60 %	
B. D. for N. E. Hangers—Small. Med. Large.		dis 10 %		Annealed Fence, Nos. 8 & 9.		dis 55 %	
Per 100 feet.		dis 10 %		Annealed Grape, Nos. 10 to 14.		dis 50 & 10 %	
RIVETS.				Fence Staples, Galvanized.		dis 10 %	
Iron and Tinned, new list, Dec. 10, 1881.		dis 40 %		Japanned Barb Fence.		dis 10 %	
In bulk, new list, Dec. 10, 1881.		dis 40 %		Galvanized Barbed Fence.		dis 10 %	
Copper Rivets and Butts.		dis 45 %		Buck Thorn Galvanized.		dis 10 %	
Nos. 7 8 9 10 11 12 13 14 15.		dis 45 %		Picture Wire.		dis 40 %	
Rivet Sets.		dis 40 %		Clothes Line Wire, Galvanized.		dis 40 %	
RODS.				Wire Cloth, green, drab and black.		dis 40 %	
Stair, Brass.		dis 25 %		WRENCHES.			
Stair, Black Walnut.		dis 60 cts. net		American Adjustable.		dis 45 %	
RULES.				Baxter's Adjustable "S," list Jan., 1880.		dis 20 & 5 %	
Boxwood. Ivory.		dis 75 %		Baxter's Diagonal.		dis 20 %	
Chapin's.		dis 40 & 10 %		Coes' Genuine.		dis 60 %	
Standard.		dis 40 & 10 %		Coes' "Mechanics".		dis 60 & 10 %	
Stanley.		dis 40 & 10 %		Coes' Pattern, Malleable.		dis 75 %	
Stevens & Co.		dis 70 & 10 %		Coes' Pattern, Wrought.		dis 60 & 10 %	
Stevens & Co. Miscellaneous.		dis 50 & 10 %		Girard Standard.		dis 50 & 10 %	
SAD IRONS.				Girard Agl.		dis 60 & 10 %	
Self-Heating, Charcoal.		dis 9.00 net		Always Ready.		dis 20 %	
Mrs. Pott's Irons.		dis 35 %		WRINGERS.			
Enterprise Star Irons, new list, July 20, '82.		dis 35 %		Universal, XX, No. 2 1/2.		dis 35.00	
Comb'd Fluter and Sad Iron.		dis 15 %		Universal, XX, No. 2.		dis 40.00	
Common Sad Irons.		dis 25 %		Universal, XX, No. 1 1/2.		dis 51.00	
SAND PAPER.				Universal, XX, No. 1.		dis 66.00	
Haeder & Adamson's Flint, 00 at 1/2.		dis 35 %		Universal, XX, No. 8.		dis 20.35	
Haeder & Adamson's Flint, 2, 2 1/2, 3, 5.		dis 35 %		Universal, XX, No. 12.		dis 22.75	
Haeder & Adamson's Flint, Assort'd 4 7 8 9 10.		dis 35 %		Universal, XX, No. 18.		dis 30.25	
Haeder & Adamson's Star.		dis 35 %		Peerless, No Cogs, No. 1.		dis 42.00	
Haeder & Adamson's Emery.		dis 35 %		Peerless, with Cogs, No. 2 1/2.		dis 45.00	
J. Bartle's Sand, Flint and Emery Paper.		dis 30 & 5 %		Peerless, with Cogs, No. 2.		dis 48.00	
SASH COORD.				MISCELLANEOUS.			
Common.		dis 14 c. net		"Diamond" Vegetable Grater.		dis 5.00 per doz., 10 %	
Patent.		dis 17 c. net		Rotary Knife Potato Parer.		dis 18.00 per doz., net	
Silver Braided Lake Hemp.		dis 10 %		Metallic Shingles.		dis 5.50 and 6.50 per square.	
Silver Braid, Lake White Cotton.		dis 10 %		Hopper Cherry Seeders.		dis 5.00 per doz, net	
Silver Braided Lake Drab Cotton.		dis 10 %		COVERT'S GOODS.			
Silver Lake Cable Laid, Bengall Unbleached		dis 10 %		Loop Harness Snaps.		dis 50 %	
Hemp, 17 cts.		dis 10 %		Martingale Loop Snaps.		dis 50 %	
Russian Hemp, 19 cts.		dis 10 %		Round Eye.		dis 50 & 10 %	
Italian Hemp, 34 cts.		dis 10 %		Round Eye Swivel.		dis 50 %	
SASH WEIGHTS.				Loop Swivel.		dis 50 %	
Solid Eyes, in 500 lb. lots and over.		dis 1 1/2 c. net		Open Eye.		dis 40 %	
SAUSAGE STUFFERS OR FILLERS.				Strap Eye.		dis 40 %	
Miles.		dis 20 cts. net		Leather Horse Ties.		dis 35 %	
Perry.		dis 25 cts. net		Snap and Thimbles.		dis 50 & 10 %	
SILVER PLATED HOLLOW WARE.				Thimbles.		dis 50 & 10 %	
Wm. Rogers Manf. Co.		dis 50, 5 & 5 %		Hammock Ropes.		dis 60 %	
Holmes, Booth & Hayden.		dis 40 & 10 & 5 %		Horse Tie (Snap and Thimble) Hemp.		dis 50 %	
Brown Bros.		dis 40 & 10 & 5 %		" " " " " Jute.		dis 50 & 10 %	
Wallace's Steel Silver Plated.		dis 33 1/2 & 10 %		" " " " " Jute.		dis 50 & 10 %	
Rogers Bros 1247.		dis 50 %		Lariat Tether.		dis 50 %	
C. Rogers & Bro.		dis 40, 10 & 5 %		Picket Pins.		dis 40 %	
SPOKE TRIMMERS.				Horse Tie. O. K.		dis 50 & 10 %	
Bonney's.		dis 10, dis 40 & 5 %		Cattle "			

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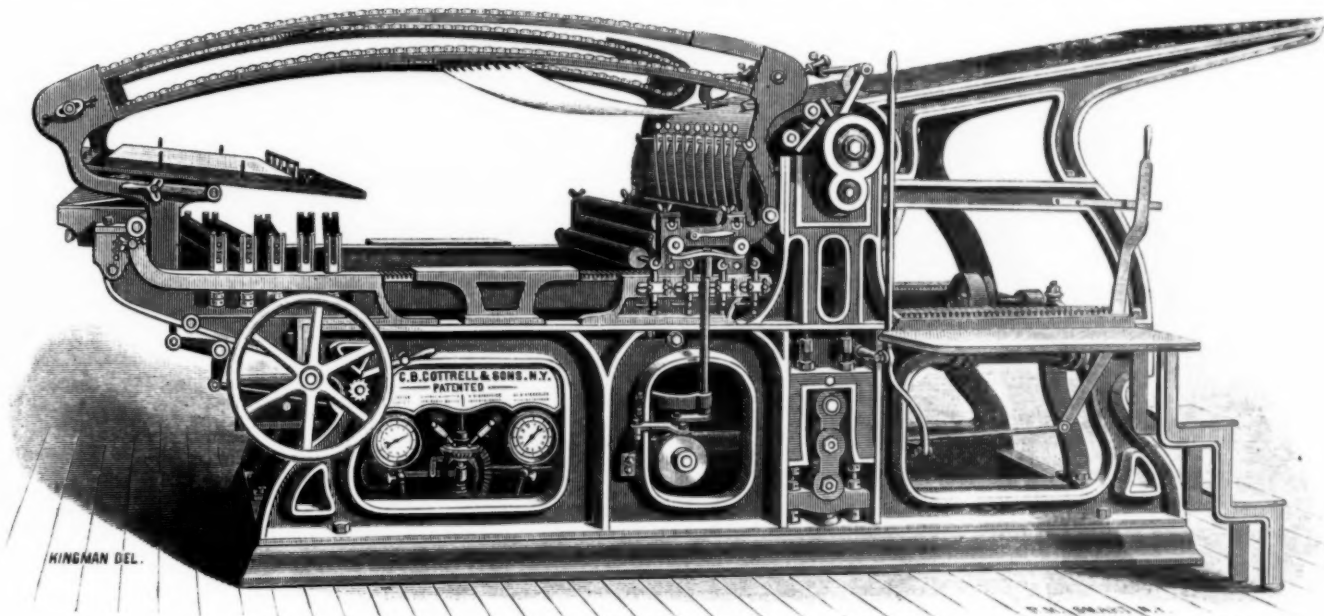


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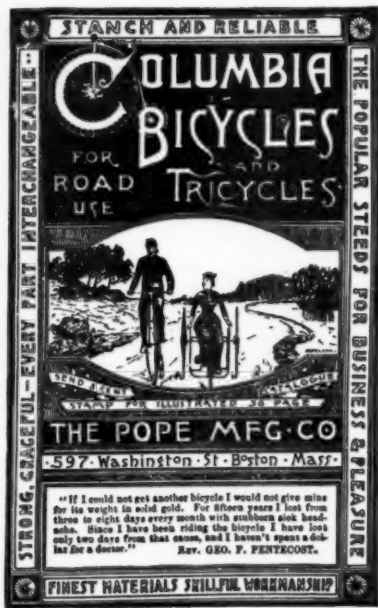
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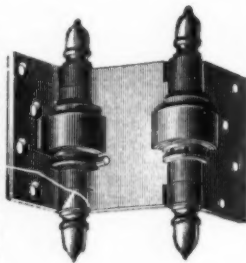
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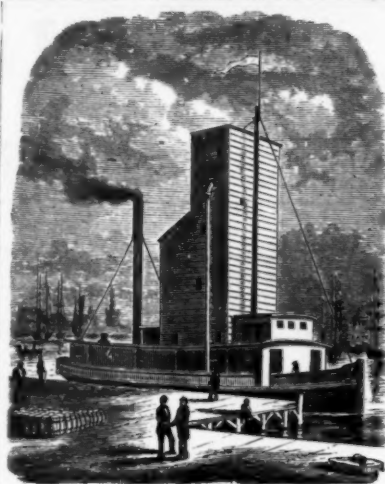
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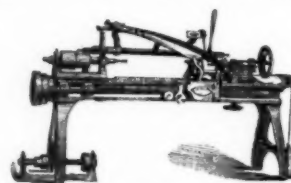
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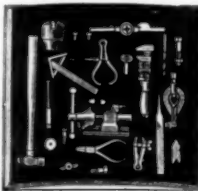
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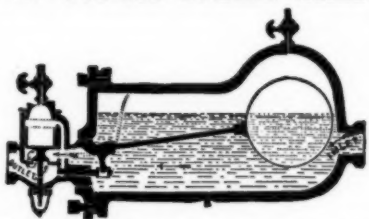
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One Trimming Saw.

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One Spoke Throater.

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One hundred feet of Shafting with couplings complete.

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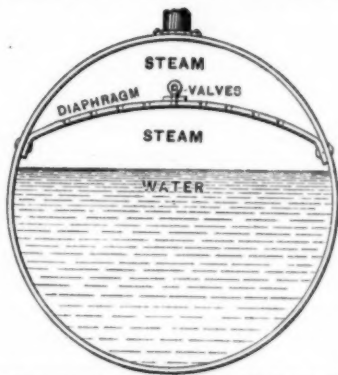
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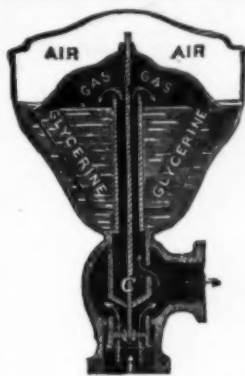
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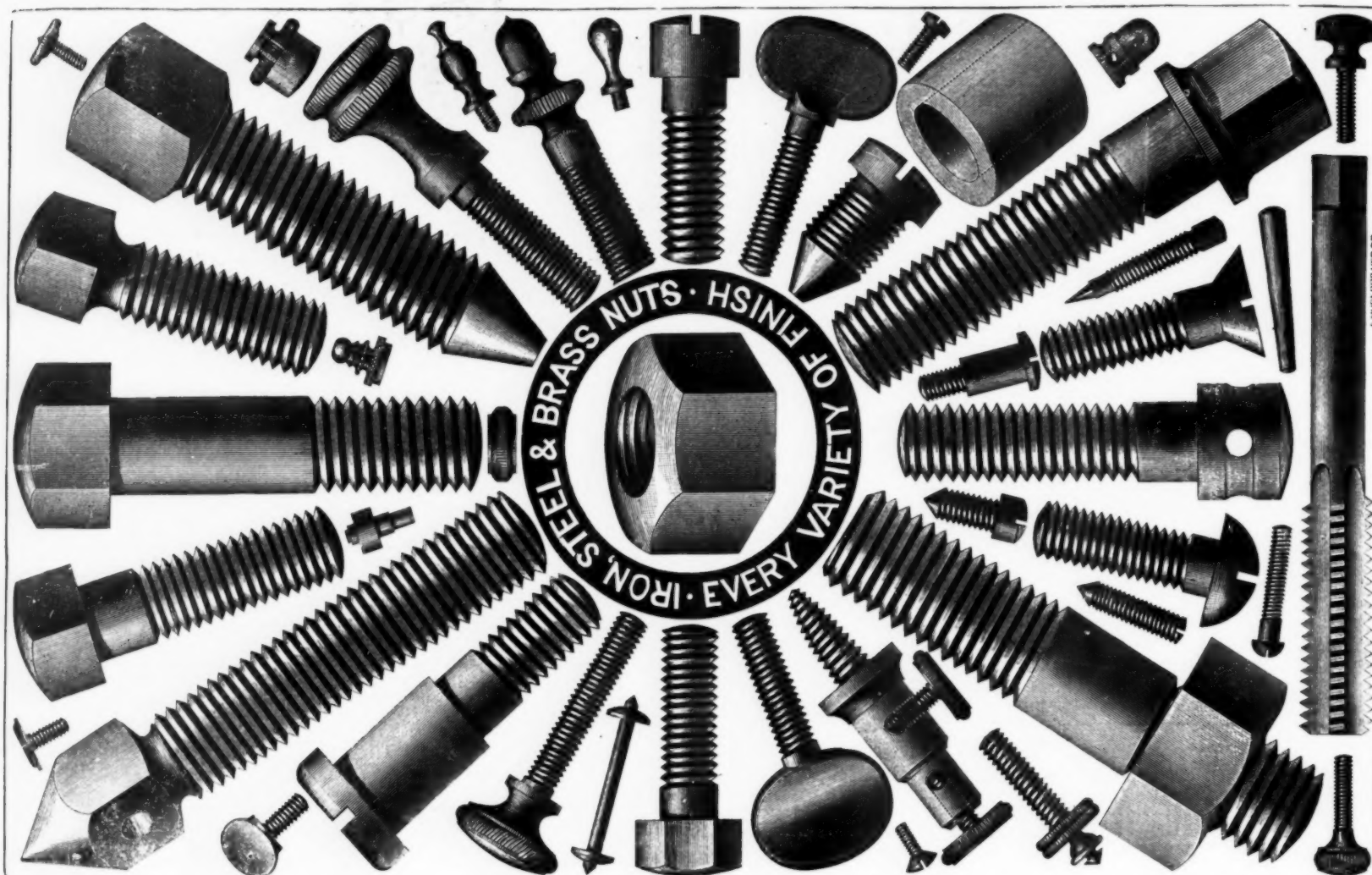
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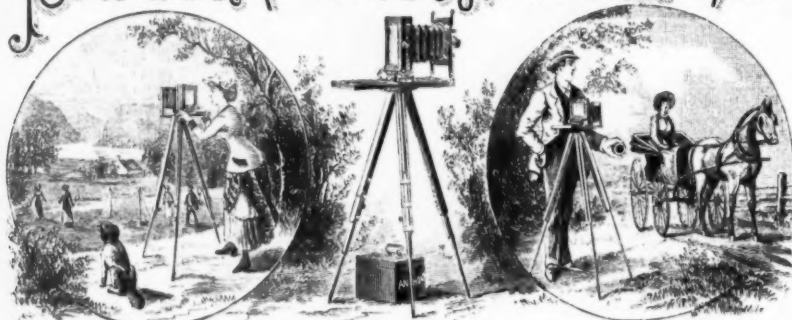
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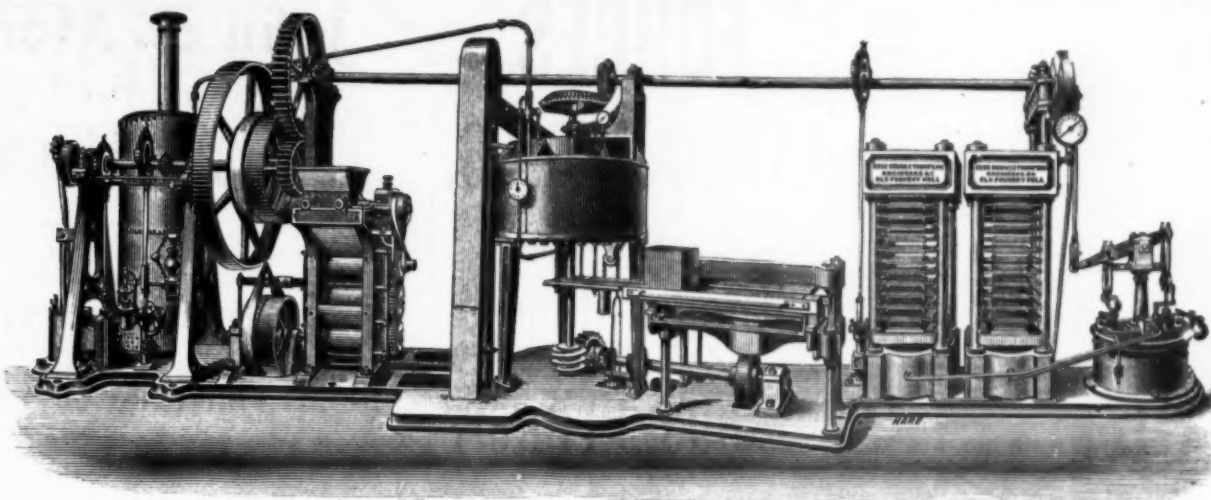
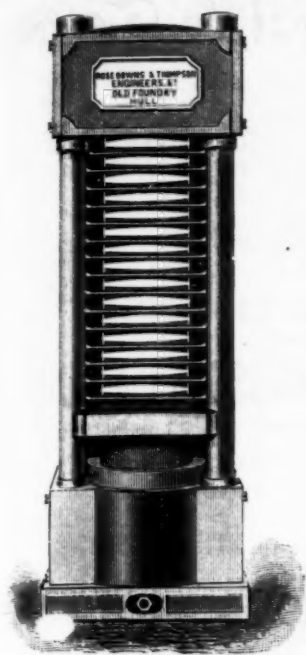
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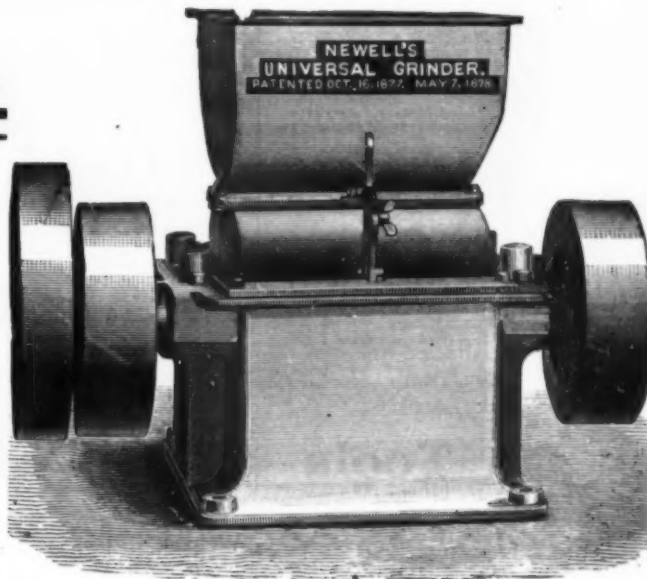
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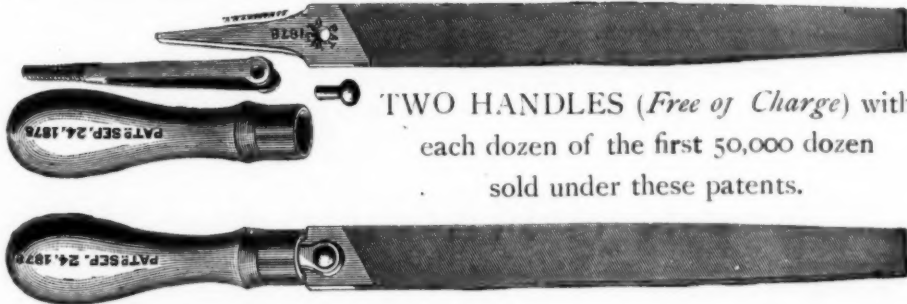
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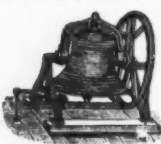
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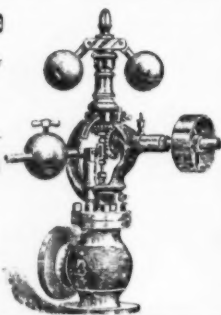
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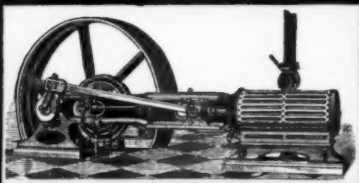
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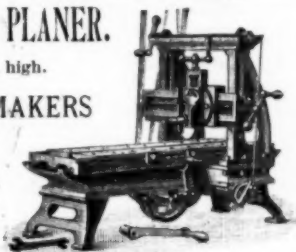
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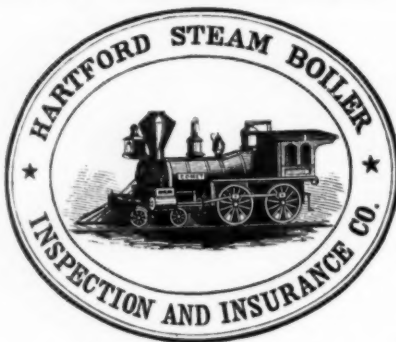
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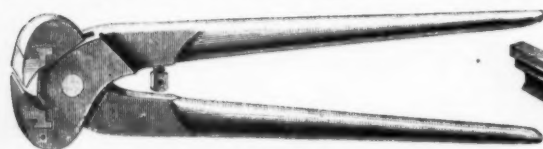
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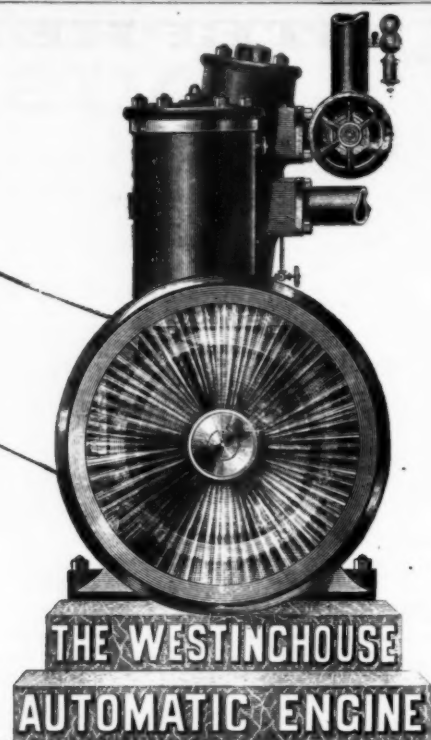
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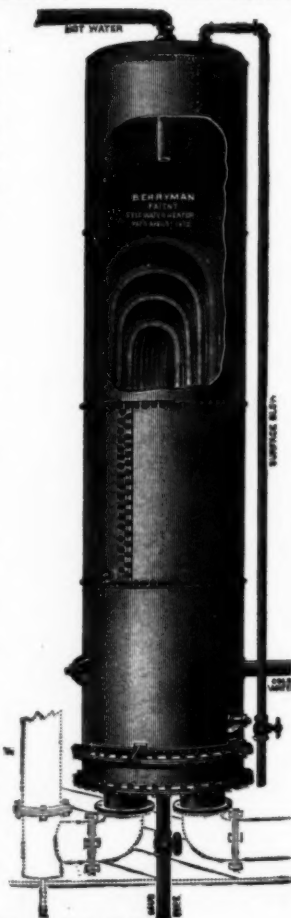
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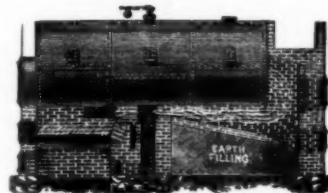
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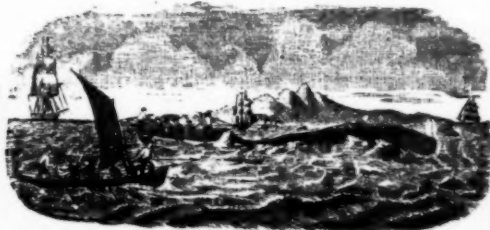
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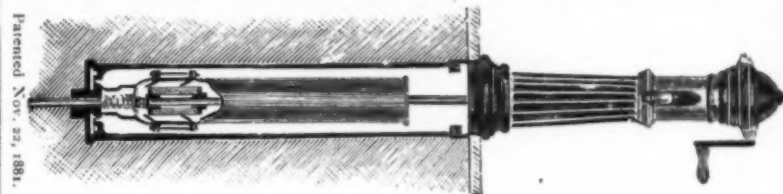
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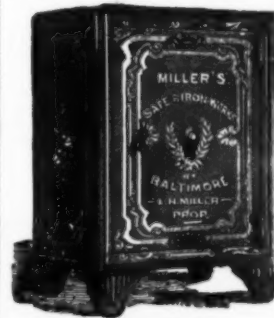
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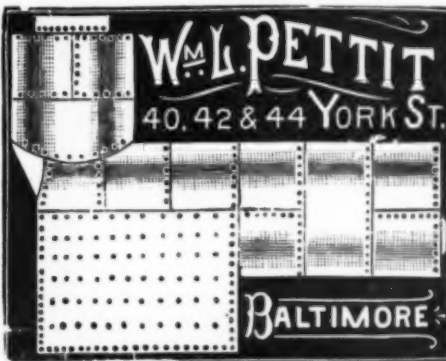
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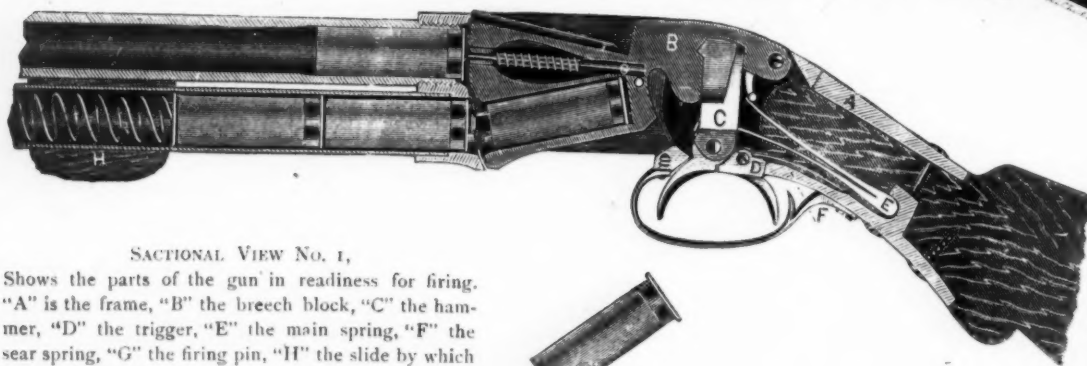
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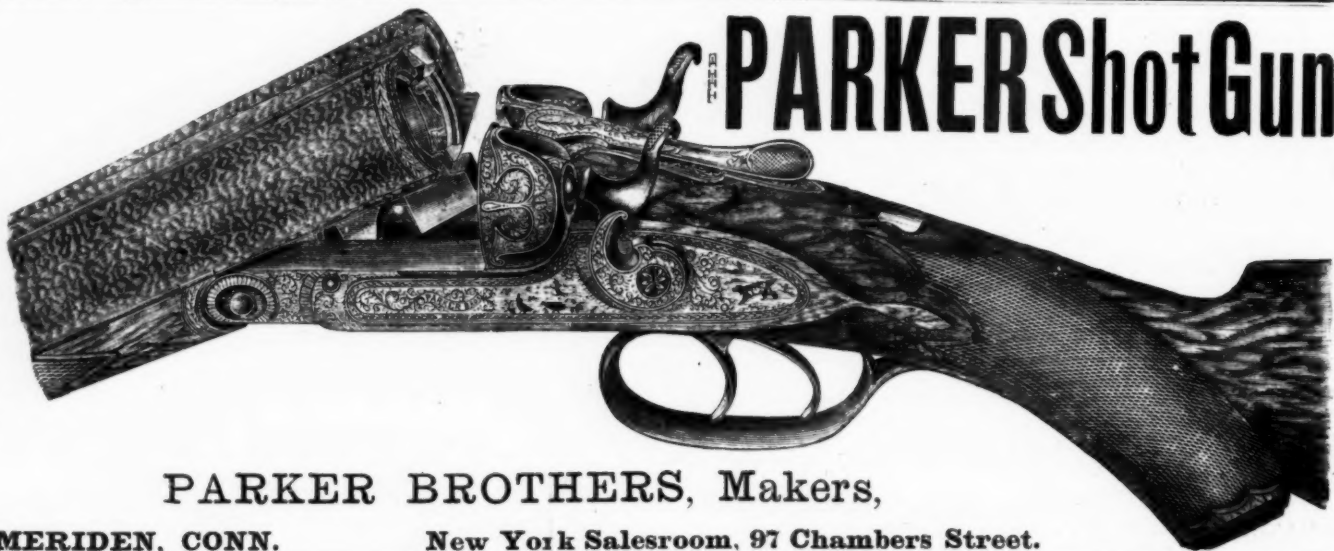
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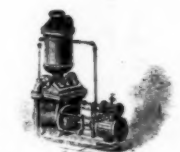
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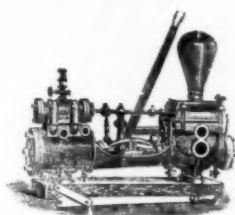
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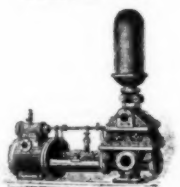
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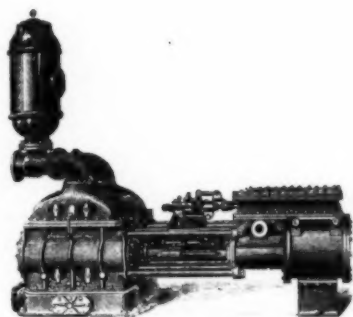
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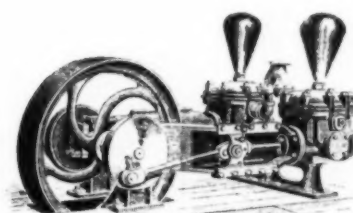
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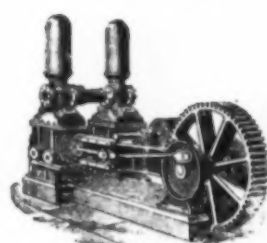
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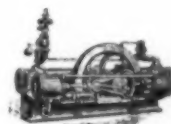
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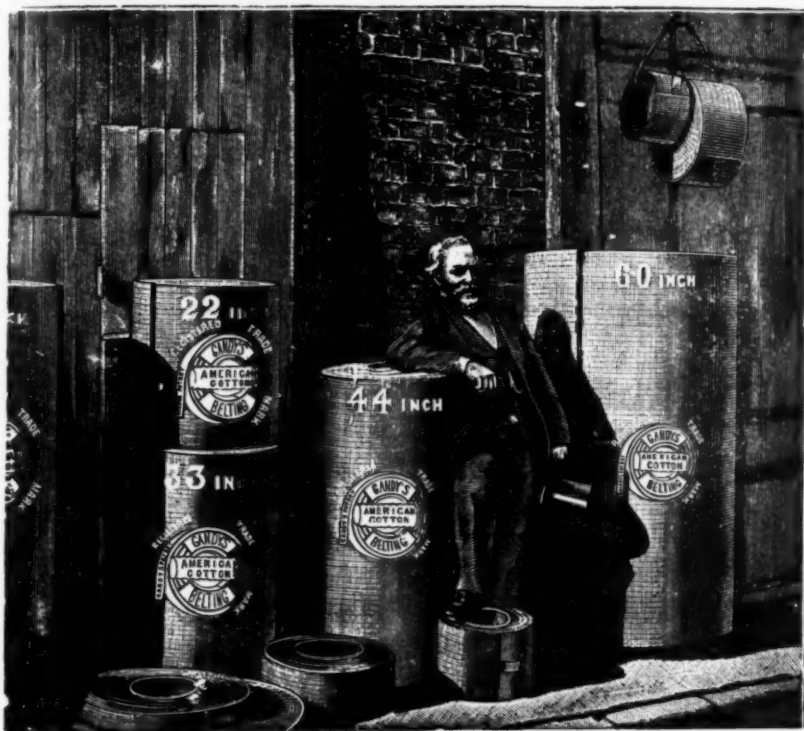
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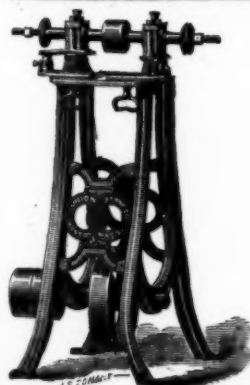
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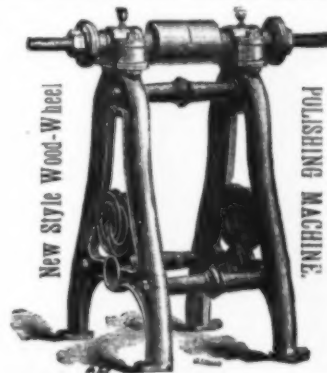
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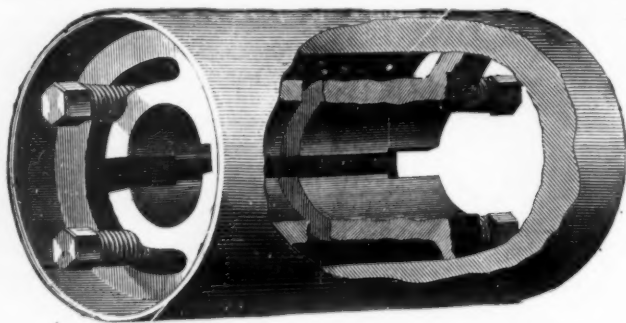
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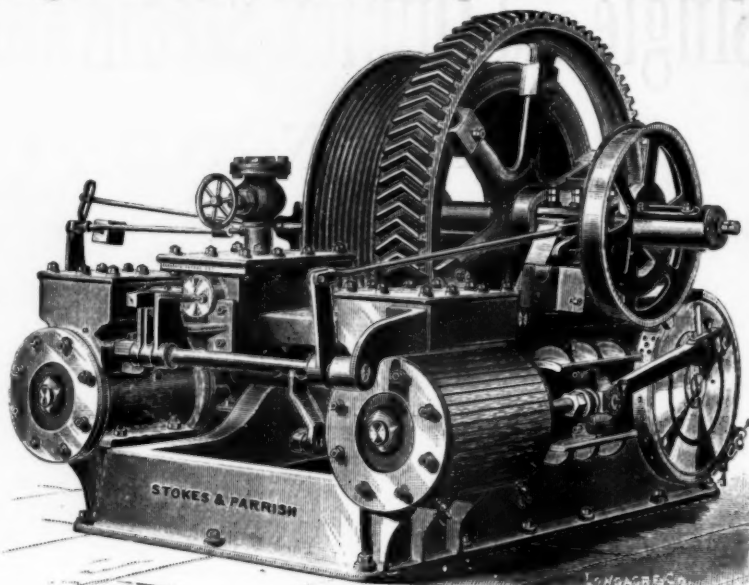
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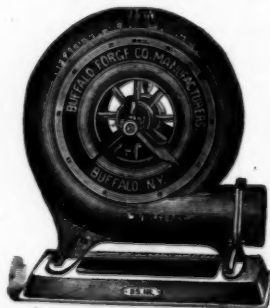
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